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To dear Mrs Osgood - with kinde
and best wishes, from her friend
Jane Fraser.

March 18th 1839.

A

GENERAL AND BIBLIOGRAPHICAL

DICTIONARY OF THE FINE ARTS.

C. and C. Whittingham, Chiswick.

A

GENERAL AND BIBLIOGRAPHICAL

DICTIONARY OF THE FINE ARTS.

CONTAINING

EXPLANATIONS OF THE PRINCIPAL TERMS

USED IN THE

Arts of Painting, Sculpture, Architecture, and Engraving,

IN ALL THEIR VARIOUS BRANCHES;

HISTORICAL SKETCHES

OF THE

RISE AND PROGRESS OF THEIR DIFFERENT SCHOOLS;

DESCRIPTIVE

ACCOUNTS OF THE BEST BOOKS AND TREATISES ON THE FINE ARTS;

And every useful Topic connected therewith.

By JAMES ELMES, M. R. I. A. ARCHITECT;

Author of "Lectures on Architecture;" "The Life of Sir Christopher Wren;" "An Essay on the Law of Dilapidations," &c. &c.

"Etenim omnes artes, quæ ad humanitatem pertinent, habent quoddam commune, vinculum, et quasi cognatione quadam inter se continentur." CICERO *pro Archia.*

LONDON:

PRINTED FOR THOMAS TEGG, 73, CHEAPSIDE:

R. M. TIMS, DUBLIN; AND R. GRIFFIN AND CO. GLASGOW.

1826.

ENVIRON.
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TO THE

RIGHT HONOURABLE ROBERT PEEL, M. P.

ETC. ETC. ETC.

HIS MAJESTY'S PRINCIPAL SECRETARY OF STATE FOR THE HOME DEPARTMENT;

THIS DICTIONARY,

ILLUSTRATIVE OF THOSE ARTS

WHICH HE SO WELL UNDERSTANDS AND SO NOBLY PATRONISES,

IS,

BY HIS KIND PERMISSION,

MOST RESPECTFULLY DEDICATED,

BY HIS MOST FAITHFUL

AND OBLIGED SERVANT,

JAMES ELMES.

LONDON, OCT. 15, 1825.

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PREFACE.

In the present state of intellectual society, when the Sovereign and the Legislature of the country are giving such splendid encouragement to the Fine Arts; when every class of the people is daily becoming more interested in their cultivation; when new societies for their encouragement are being established, and those already in existence are increasing; a Dictionary exclusively devoted to the Literature of the Fine Arts is peculiarly necessary.

Such a work has never before appeared in the English language: and, although there are treatises in the French, Italian, and other modern languages, yet they are inapplicable in many requisites to the English student, professor, or patron of the British School of Art.

With the French the Fine Arts comprise not only Painting, Sculpture, Architecture, and Engraving, but also poetry, music, and the dramatic art, which in England are separately classed among the *Polite* arts, as well as dancing, fencing, mimetic action, and other bodily accomplishments, which we do not admit into either. The Italians are more select in their arrangement, but their disquisitions rarely extend to the English school, and are consequently defective in information concerning an important feature in modern art; as the time is now arrived when no treatise on the Fine Arts can be complete in which the English school, its artists, its mode of practice, and its works are omitted.

The present Work, therefore, professes to give in alphabetical order the essence of the best Treatises in the English, the French, and the Italian languages, on the Theory and Practice of the Fine Arts, divested of all extraneous matter, and adapted to the present state of British Art and Literature. To the various leading articles is added a Descriptive Cata-

logue of the best Books and Treatises thereon, so that the investigating student may know what authorities to refer to when he wishes or requires further information.

In saying that this Work is intended to be a complete Manual of the Fine Arts, it may be necessary to name some of the works which have been consulted and amalgamated into it. They are *Le Dictionnaire des Beaux Arts, par* La Combe; *Dictionnaire de Peinture et de Sculpture, par* Watelet; *Encyclopédie Méthodique; Théorie générale des Beaux Arts, par* Sulzer; *Le Dictionnaire des Beaux Arts, par* Millin; *Abecedario Pittorico; Principi d'Architettura civile; Manuale de Pittore per il anno* 1792; *Memorie per le Belle Arti.* The Biographical Works of Blankenburg, Sulzer, &c. the Catalogues of Paignon Dijonval, Count Stroganoff, &c. &c. &c.; the Works of Mengs, Lairesse, Hagedorn, Da Vinci, De Piles, Alberti, Winckelmann, Richardson, Reynolds, Barry, Pilkington, Opie, West, Fuseli, &c. &c.: in short, every Work in the libraries of the British Museum, the Royal Academy, and other public and private libraries, to which the writer has access, have been consulted to render The Dictionary of the Fine Arts as useful and as complete as possible.

The Editor cannot conclude without returning his best thanks to his friend Mr. James Ollier, whose able assistance in the latter half of the present work (other engagements pressing much on his own time,) has both expedited and improved it.

London, Oct. 15, 1825.

A

DICTIONARY

OF

THE FINE ARTS.

ABACISCUS. *In ancient architecture.* The square compartments of musaic pavements.

ABACOT. [from *abacus.*] *In costume.* The cap of state, or coronet, worn anciently by the kings of England, somewhat resembling in form that of a double crown.

ABACUS. [ἄβαξ, Gr. *abacus*, Lat. *abaque*, Fr.] *In architecture.* The square member or parallelopipedon which covers the top of a column. The Greek derivative of this word signifies a table or tablet, which form the ancient Abacus simply assumes. Vitruvius calls by this name the square bronze or marble slabs with which the ancients covered the roofs of their buildings; and also the counting-tables used for various calculations. The one in most general use was called Abacus Pythagoricus, after the name of its inventor, and served for the purpose of the common multiplication table. The Abacus of architecture is the upper or crown member of every column and pilaster. Its form is various in the different orders, and in the different nations who have used them in their styles or modes of architecture. In the remains of ancient Egyptian architecture it is, in some instances, nothing more than a plain cube of stone; and in others two or more such cubes placed one above the other, either plain or carved. Among the Greeks and Romans, the Abacus is the most essential portion of the capital, as it was in the original column a tile to protect the upper portion of the shaft. In the Tuscan, the Doric, and the Ionic orders of architecture the Abacus is rectangular in plan; but in the Corinthian and Roman, or composite orders, it is hollowed into a circular indentation on its faces; and, except in a very few instances, as in those of the capitals of the Poikile at Athens, cut off at the angles. These are sometimes called the horns of the Abacus. The term Abacus is also, but inappropriately, applied to the upper member of pedestals, and of the capitals of Gothic pillars. It is more properly applied to the coverings of the baskets which are placed on the heads of figures called Caryatides and Canephoræ by way of capitals. The word however is most appropriately applied in architecture to a parallelopipedon, covering the summit of any circular body.

ABATON. [ἄβατον, Gr.] *In architecture.* This word is used by Vitruvius generally for any impassable place, and specifically to a building at Rhodes, to which every one had not leave of access, from its containing a trophy and two statues of bronze placed there by Queen Artemisia, after having surprised that city.

ABBEY or ABBY. [ἀββάτεια, Gr. from ἀββᾶ, father; *abbatia*, Lat. *abbaie*, Fr.] *In architecture.* A monastery or religious house for persons of either sex, governed by a superior under the title of abbot or abbess. These buildings admit of a great display of architectural splendour, particularly those which were built before the protestant reformation, and were in a great degree the occasion of much encouragement of all the fine arts.

ABBREVIATION. [*abbreviatura*, Lat.] *In archaiology.* A shortening by contraction of words in inscriptions; as inscribing a letter for a word, &c. A knowledge of the abbreviations commonly found on the Roman coins, monuments, and remains of architecture and sculpture are of the greatest use to the antiquary and student of the fine arts. The following collection, in part taken from the Encyclopædia Metropolitana, will be found useful in reading ancient inscriptions.

A. Absolvo, absolutio, aiunt, aliquando, ager, albo, annos, argentum, Augustus, &c.

A. A. Auro argento.

A. A. A. F. F. Auro argento ære flando feriunda.

A. A. S. L. M. Apud assum sibi legavit monumentum. Apud agrum sibi locum monumenti.

AB. Abdicavit.

AB. AUG. M. P. XXXXI. Ab Augustâ millia passuum quadraginta unum.

AB. AUGUSTOB. M. P. X. Ab Augustobrigâ millia passuum decem.

A. B. M. Anima benè merenti.

ABN. Abnepos.

A. CAMB. M. P. XI. A Camboduno millia passuum undecim.

ACCENS. COS. Accensus consulis.

A. COMP. XIIII. A Compluto quatuor decem.

A. C. P. VI. A capite, *vel* ad caput pedes sex.

A. D. Ante diem. Agris dandis.

ADJECT. H-S. IX. ∞. Adjectis sestertiis novem mille.

A. D. P. Ante diem pridiè.

ADQ. Adquiescit *vel* adquisita *pro* acquisita.

ÆD. II. IĪ. VIR. II. Ædilis iterum, duumvir iterum.

ÆD. II. VIR. QUINQ. Ædilis duumvir quinquennalis.

ÆD. Q. II. VIR. Ædilis quinquennalis duumvir.

ÆL. Ælius, Ælia.

ÆM. *vel* AIM. Æmilius, Æmilia.

AER. Ærarium Arum, *pro stipendio.*

A. K. Ante kalendas.

A. G. Animo grato: Aulus Gellius.

AG. Ager *vel* Agrippa.

ALA. I. Ala prima.

A. L. P. Animo libens posuit.

A. L. V. S. Animo libens votum solvit.

A. MILL. XXXV. A milliari triginta quinque, *vel* ad milliaria triginta quinque.

A. M. XX. Ad milliare vigesimum.

AN. A. V. C. Anno ab urbe condita.

AN. C. H. S. Anno cent. hic situs est.

AN. DCLX. Anno sexcentesimo sexagesimo.

AN. II. S. Annos duos semis.

AN. IVL. Annos quadrāginta sex.

AN. N. Annos natus.

ANN. LIII. H. S. E. Annorum quinquaginta-trium hic situs est.

ANN. NAT. LXVI. Annos natus sexaginta sex.

ANN. P. Annonæ prefectus.

ANN. PL. M. X. Annos *vel* annis plus minus decem.

AN. ⊖. XVI. Anno defunctus decimo sexto.

AN. V. XX. Anno vixit viginti.

AN. P. M. Annorum plus minus.

A. XII. Annis duodecim.

A. N. TR. Argentum novum trevirense.

AN. P. M. L. Annorum plus minus quinquaginta.

AN. P. R. C. Anno post Romam conditam.

AN. V. P. M. II. Annis vixit plus minus duobus.

AN. XXV. STIP. VIII. Annorum viginti quinque stipendii, *vel* stipendiorum octo.

A. P. M. Amico posuit monumentum.

A. P. T. Amico posuit titulum.

A. P. V. C. Annorum post urbem conditam.

APVD. L. V. CONV. Apud lapidem quintum convenerunt.

A. RET. P. IIĪ. S. Ante retropedes tres semis.

AR. P. Aram posuit.

ARG. P. X. Argenti pondo decem.

A. RION̄. A rationibus.

A. V. B. A viro bono.

A. V. C. Ab urbe conditâ.

A. V. L. Annos vixit quinquaginta, animo vovit libens.

AVSP. S. Auspicante sacrum.

A. XX. H. EST. Annorum viginti hic est.

B. *pro* V. berna *pro* verna, bixit *pro* vixit, bibo *pro* vivo, bictor *pro* victor, bidua *pro* vidua.

B. A. Bixit annis, bonus ager, bonus amabilis, bona aurea, bonum aureum, bonis auguriis, bonis auspiciis.

B. B. Bona bona, benè benè.

BD. D. Bonis deabus.

B. F. Bonâ fide, bona femina, bona fortuna, benè factum.

B. F. reversed thus, ꟻ. ꟻ. Bona femina, bona filia.

B. H. Bona hereditaria, bonorum hæreditas.

B. I. I. Boni judicis judicium.

B. L. Bona lex.

B. M. P. Benè merito posuit.

B. M. P. C. Benè merito ponendum curavit.

B. M. S. C. Benè merito sepulcrum condidit.

BN. EM. Bonorum emptores.

BN. H. I. Bona hic invenies.

B. RP. N. Bono reipublicæ natus.

B. A. Bixit, *id est*, vixit annis.

BIGINTI. Viginti.

BIX. ANN. XXCI. M. IV. D. VII. Vixit annis octoginta unum, mensibus quatuor, diebus septem.

BX. ANUS. VII. ME. VI. DI. XVII. Vixit annos septem, menses sex, dies septem decim.

C. Cæsar, Caio, Caius, censor, civitas, consul, condemno, conscriptus, conjux.

C. C. Carissimæ conjugi, calumnia causa, consilium cepit.
C. C. F. Caius Caii filius.
C. B. Commune bonum.
C. D. Comitialibus diebus.
C. H. Custos hortorum *vel* hæredum.
C. I. C. Caius Julius Cæsar.
CC. VV. Clarissimi viri.
CEN. Censor, centuria, centurio.
CERTA. QUINQ. ROM. CO. Certamen quinquennale Romæ conditum.
C. F. C. Clavi figendi causâ.
CL. Claudius.
CL. V. Clarissimus vir.
CH. COH. Cohors.
C. M. *vel* CA. M. Causa mortis.
C. O. Civitas omnis.
COH. I. *vel* II. Cohors prima *vel* secunda.
COS. ITER. ET. TERT. DESIG. Consul iterum et tertium designatus.
COS. TER. *vel* QUAR. Consul tertium *vel* quartum.
COSS. Consules.
COST. CUM. LOC. H-S. ∞ D. Custodiam cum loco sestertiis mille quingentis.
C. R. Civis Romanus.
CS. IP. Cæsar imperator.
C. V. Centum viri.

D. Decius, decimus, decuria, decurio, dedicavit, dedit, devotus, dies, divus, Deus, dii, Dominus, domus, donum, datum, decretum, &c.
D. A. Divus Augustus.
D. B. I. Diis benè juvantibus.
D. B. S. De bonis suis.
DCT. Detractum.
DDVIT. Dedicavit.
D. D. Donum dedit, datis datio, Deus dedit.
D. D. D. Dono dederunt, *vel* datum decreto decurionem.
D. D. D. D. Dignum Deo donum dedicavit.
DDPP. Depositi.
D. D. Q. Dedit dedicatque *vel* donavitque.
D. N. Dominus noster.
D. D. N. N. Domini nostri.
D. D. Q. O. H. L. S. E. V. Diis deabusque omnibus hunc locum sacrum esse voluit.
DEC. Decimo.
DETI. Defuncti.
DIG. M. Dignus memoriâ.
D. IM. S. Diis immortalibus sacrum.
D. M. S. Diis manibus sacrum.
D. M. Æ. Deo magno æterno.
D. N. Dominus noster.
D. O. Diis omnibus, *vel* Deo optimo.
D. O. Æ. Deo optimo æterno.
D. O. M. Deo optimo maximo.
DOSC. Dioclesianus.
D. P. Divus pius, diis penatibus, patriis, *vel* de periculo, dotem petet *vel* devota persona, *vel* decretum principis.
DPC. Deprecatio.
DPO. Depositio.
D. PF. De præfecto.
D. P. ORT. De parte orientis.
D. PP. Deo perpetuo.
DPS. Discipulus.
DQ. Denique, Diis quirinalibus.
DR. Drusus.
DR. P. Dare promittit.
D. RM. De Romanis.
D. RP. De Republicâ.
DS. Deus.
D. S. P. F. C. De sua pecunia faciundum curavit.
DT. Duntaxat. Durat.
D. V. Devotus vir, vester *vel* diis volentibus, *vel* dies quintus.
DVL. *vel* DOL. Dulcissimus.
D. VS. Deæ virgines, de virtutibus, *vel* de verbis.
DVS. Devotus, &c.
DEC. XIII. AVG. XII. POP. XI. Decurionibus denariis tredecim, augustalibus duodecim.
D. IIII. ID. Die quartâ idus.
D. VIII. Diebus novem.
D. V. ID. Die quintâ idus.

E. Ejus, ergo, esse, est, erexit, exactum, &c.
E. B. Ejus bona.
E. C. E comitio, *vel* capitolio.
E. C. F. Ejus causa fecit.
E. D. Ejus domus, *vel* dominus.
ED. Edictum.
E. E. Ex edicto.
EE. N. P. Esse non potest.
E. F. Ejus filius.
EG. Egil, egregius.
E. H. Ejus hæres, ex hæredibus, *vel* ex hæreditate est.
EID. Idus.
EIM. Ejusmodi.
E. L. Ea lege.
E. M. Elexit *vel* erexit monumentum, ex more.
EMP. Emptor.
EM. Q. Equitum magister.
E. N. Etiam nunc, est noster *vel* non. Enim.
EOR. Eorum.
EP. Epistola.
E. P. Eden dum parie, è palatio, è publico.
EP. M. Epistolam misit.
EQ. M. Equitum magister.
EQ. O. Equester ordo.
EQ. P. Eques publicus.
EQ. R. Eques Romanus.
ER. Erit *vel* erunt.
EX. A. D. K. Ex ante dum Kalendas.
EX. A. D. C. A. Ex autoritate divi Cæsaris Augusti.

EX. A. D. V. K. DEC. AD. PRID. K. IAN. Ex antè diem quinto Kalendas Decembris ad pridiè Kalendas Januarii.
EX. H-S. X. P. F. I. Ex sestertiis decem parvis fit jussit.
EX. H-S. GIↃN. Ex sestertiis mille nummûm.
EX. H-S. ∞∞∞∞. Ex sestertiis quatuor millia.
EX. H-S. N. CC. L. ∞ D. XL. Ex sestertiis nummorum ducentis quinquaginta millibus, quingentis quadraginta.
EX. H-S. DC. ∞ D. XX. Ex sestertiis sex centis millibus, quingentis viginti.
EX. KAL. IAN. AD. KAL. IAN. Ex Kalendis Januarii ad Kalendas Januarii.
EX. S. C. Ex senatus consulto.
EX. V. Ex voto.

F. Fabius, fecit, factum, faciendum, familia, famula, factus, Februarius, feliciter, felix, fides, fieri, fit, femina, filia, filius, frater, finis, flamen, forum, fluvius, faustum, fuit.
FA. Filia.
F. A. Filio amantissimo *vel* filiæ amantissimæ.
FAB. Fabrum *vel* fabrorum.
FAC. B. Factum benè.
FAC. C. Faciendum curavit.
FA. F. Factum feliciter.
FAM. Familiaris.
FAMA. Familia.
F. AN. X. F. C. Folio *vel* felix annorum decem faciundum curavit.
FB. Fabricant.
F. C. Fieri *vel* faciendum curavit, fidei commissum. Fecet *vel* fecerunt.
F. D. Flamen Diales, filius dedit, factum dedicavit.
F. D. Fide jussor, fundum.
FEA. Femina.
FEB. Februarius.
F. E. Factum est, *vel* filius ejus.
FE. C. Fermè centum.
FF. Fabrè factum, filius familias, fratris filius.
F. F. F. Ferro, flamma, fame, fortior, fortuna, fato.
FF. Fecerunt.
FL. F. Flavii filius.
F. FQ. Filiis filiabusque.
FIX. ANN. XXXIX. M. I. D. VI. HOR. SCIT. NEM. Vixit annos triginta novem, mensem unum, dies sex, horas scit nemo.
FO. FR. Forum.
FOR. Fortè, *vel* fortis, *vel* foras, *vel* fortuna.
F. P. Forma publica, fama publica, fidei promissor, *vel* fides promissa.
F. PP. R. Forum populi Romani.
F. R. Forum Romanum, *vel* filius regundorum.
FR. COR. Forum Cornelii
FR. I. Forum Julium.
FR. L. Forum Livium.
FR. S. Forum Sempronii.
FR. T. Forum Trajani.
FVNC. Functus.

G. Gellius, Gaius *pro* Caius, genius, gens, gaudium, gesta, gratia, gratis, &c.
G. AV. G. Genio Augusti.
GAB. Gabinius.
GAL. Gallus, Gallerius.
G. B. Gens bona.
G. C. Genio civitatis.
G. D. Gens desolata.
GD. Gaudium.
GEN. P. R. Genio populi Romani.
GEN. CORN. Gente Corneberis.
GENS. Gentes.
GER. Germanicus.
G. F. Gula filiorum, Germanus frater, gemina fidelis.
GG. Gesserunt.
GL. Gloria.
GL. P. Gloria parentum, *vel* patriæ, *vel* populi.
GL. N. L. Gloria nominis Latini.
GL. S. Gallus Sempronius.
GN. Gneus *pro* Cneus, genius, gens.
GN. R. S. Genus Romani senatus.
GNT. Gentes.
G. M. Gene mala.
GOTH. Gothicus.
GRA. Gracchus.
GRC. Græcus.
GR. P. Gloria parentum, *vel* populi, &c.
G. S. Genio sacro.
GX. Grex.

H. Hic, habet, hastatus, hæres, homo, hora, hostis, herus, Hadrianus, honestas, honor, &c.
H. A. Hoc anno.
HA. Hadrianus.
HÆ. M. Hæredum meum.
HC. Hunc, huic, hic.
HC. AM-N. Hunc amicum nostrum.
H. D. Hic dedicavit dedicarunt, *vel* dedicaverunt.
H. E. M. TBNR. Hæc est memoria Tribunorum.
HER. Hæres, hereditatis. Herennius.
HER. *vel* HERC. S. Herculis sacrum.
H. M. Honesta mulier, *vel* hora mala, *vel* hora mortis.
H. M. D. A. Hoc mandavit dari Augustus.
H. M. E. H-S. CCIↃↃ. CCIↃↃ. IↃↃ. M. N. Hoc monumentum erexit sestertiis viginti quinque mille nummûm.

H. M. AD. H. N. T. Hoc monumentum ad hæredes non transit.
H. M. EXT. N. REC. Hoc monumentum exteras non recipit.
H. M. P. Hoc monumentum posuit, *vel* hic memoriæ posuit.
H. O. Hostis occisus.
HOM. Homo.
HOSS. Hostes.
H. R. I. R. Hic requiescit in pace.
H. S. Hic situs *vel* sita, sepultus *vel* sepulta.
H-S. N. IIII. Sestertiis mille nummùm.
H-S. CCCC. Sestertiis quatuor centum.
H-S. ∞ N. Sestertiis mille nummùm.
H-S. ∞ CCIↃↃ. N. Sestertiis novem mille nummùm.
H-S.CCIↃↃ.CIↃↃ. Sestertiis viginti mille.
H-S. XXM. N. Sestertiis viginti mille nummùm.
H. SRL. M. AVC. Hæc sepultura modo aucta.
H. S. S. Hic supra scriptis.
H. V. B. P. Herus verus bonorum possessor.

I. Junius, Julius, Jupiter, ibi, idest, immortalis, imperator, inferi, in, inter, invenit, invictus, ipse, iterùm, judex, jussit, jus, &c.
IA. Intra.
IAD. Jamdudùm.
I. AG. In agro.
I. AGL. In angulo.
IAN. Janus.
IA. RI. Jam respondi.
I. C. Juris consultus, Julius Cæsar, judex cognitionum.
IC. Hic.
I. D. Inferis diis, *vel* in dimidio, *vel* juris dicendi *vel* dicendo, *vel* in domino, Jovi dedicatum, Isidi deæ, jussu deæ, judex.
ID. Idus.
ID. E. Idem est.
I. D. M. Jovi Deo magno.
I. D. T. S. P. In diem tertium sive perendinum.
I. F. *vel* I. FO. In foro *vel* Julii filius.
IF. Interfuit.
IFT. Interfuerunt.
I. FNT. In fronte.
I. FO. C. In foro Cæsaris.
I. FO. P. In foro Palladis *vel* Pacis.
I. FO. TR. In foro Trajanis *vel* Transitorio.
IG. Igitur.
I. G. In agro.
I. H. Jacet hic, justus homo, in honestatem.
I. I. In jure, inibi, jus jurandum.
J. J. J. Justa judicavit judicia.
I. L. A. In loco absente.
I. L. P. In loco publico.

IM. Imago, immortalis, imperator.
I. M. CT. In medio civitatis.
IMM. Immolavit, immortalis, immunis.
I. MO. In medio.
IMP. Imperator.
IMPP. Imperatores viz. de duobus.
IMPPP. Imperatores viz. de tribus.
IN. Inimicus, inscripsit, interea.
IN. A. P. XX. In argo pedes viginti.
IN. H. H. In hoc honore.
I. N. H. DD. In honerem dedicatum.
I. O. M. D. Jovi optimo maximo, dedicatum.
I. R. Jovi regi, Junoni regiæ, jure rogavit.
I. S. *vel* I. SN. In senatum, judicium solvi, judicio senatus.
I. S. C. In senatus consulto, *vel* judex sacrarum cognitionum.
I. T. C. Intra tempus constitutum.
I. V. Justus vir.
IV. *vel* IIII. Quatuor.
IVC. Judicium.
JVL. Julius.
JVN. Junius.
IVV. Juventus, Juvenalis.
IVVEN. M. Juvenum moderator.
IIV. Duum-vir *vel* duum-viri.
II. V. DD. Duum viris dedicantibus.
III. V. *vel* III. VIR. Trium-vir, *vel* trium-viri.
IIII. VIR. Quatuor-vir, *vel* quatuor-viri, *vel* quatuor viratus.
IIIIII. V. *vel* VIR. Sextum-vir, *vel* se-vir, *vel* sex-vir.
IDNE. *vel* IND. *aut* INDICT. Indictio, *vel* indictione.

K. Calendæ, Cæso, Caius, Caio, Cælius, Carolus, calumnia, candidatus, caput, cardo, castra, carissimus, clarissimus, cohors, Carthago, &c.
K. AVG. Calendas Augusti.
K. DD. Castra dedicavit.
KARC. Carcer.
KK. Carissimi.
KM. Carissimus.
K. S. Carus suis.
K. Q. Calendæ Quintiles.
KR. Chorus.
KR. AM. N. Carus amicus noster.
KR. N. Carus Rex noster.
KS. Calendæ sextiles.

L. Lucius, Lucia, Lælius, Lollius, lares, Latinus, latum, legavit, lex, lector, legio, libens *vel* lubens, liber, libera, libertus, liberta, libra, locavit, &c.
L. A. Lex alia.
L. AN. Quinquaginta annis.
LA. C. Latini coloni.
L. A. D. Locus alteri datus.
L. AG. Lex agraria.

L. AN. Lucius Annius, *vel* quinquaginta annis.
L. AP. Ludi Apollinares.
LAT. P. VIII. E. S. Latum pedes octo et semis.
L. DIV. Locus divinus.
L. ADQ. Locus adquisitus.
L. D. D. D. Locus datus decreto decurionum.
LECTIST. Lextisternium.
LEG. I. Legio prima.
L. E. D. Lege ejus damnatus.
LEG. Legio.
LEG. PROV. Legatus provinciæ.
L. F. Lucius filius *vel* filii.
LG. Legavit.
L. H. Locum hunc *vel* locas hæredum.
LIB. Libertas, libertus, *vel* liberti.
LIB. URB. Liberatori urbis.
LIC. Licinius.
LICT. Lictor.
L. I. D. A. C. Lex Julia de adulteriis coercendis.
L. I. J. Locus in jure.
LL. Libentissimè, liberi, libertas, Lælius, legibus, Lucii libertus, *vel* Lucius libertus.
L. L. OO. Linguæ orientales.
L. M. Locus monumento, *vel* mortuorum.
L. N. Latini nominis.
LONG. P. VII. L. P. III. Longum pedes septem latum pedestres.
LVD. SÆC. Ludi sæculares.
LVPERC. Lupercalia.
LV. P. F. Ludos publicos fecit.
LX. Sexaginta.

M. Marcus, Marca, Martius, Mutius, maceria, magister, magistratus, magnus, manes, mancipium, marmoreus, marti, mater, maximus, memor, memoria, mensis, meus, miles, militavit, militiâ, mille, missus, monumentum, mortuus.
MA. F. &c. Manifestum fecit.
MAG. EQ. Magister equitum.
MAG. MIL. Magister militum.
MAR. VLT. Mars ultor.
MAT. P. FEC. ET. S. ET. S. P. Q. E. Mater piissima fecit, et sibi, et suis posterisque eorum.
M. AVR. Marcus Aurelius.
MAX. CS. Maximus Cæsar.
MAX. POT. Maximus pontifex.
M. B. Mulier bona.
MD. Mandatum. M. D. Mille quingenti.
MED. Medicus, medius.
M. E. M. Manceps ejus mancipii.
MENS. Menses.
MER. Mercurius, mercator.
MER. S. Mercurio sacrum.
MERK. Mercurialia, mercatus.
MES. VII. DIE. B. XI. Mensibus septem, diebus undecim.
M. F. Marci filius. Malâ fide. Malè fidus.
M. H. Malus homo.
M. I. Maximo Jovi, matri Idex *vel* Isidi, militiæ jus, monumentum jussit.
MIL. COH. Miles cohortis.
MIL. IN. COH. Militavit in cohorte.
MIN. *vel* MINER. Minerva.
MMN. Matrimonium.
MMT. Monumentum.
M. MON. MNT. MONET. Moneta.
M. *vel* MS. Mensis *vel* menses.
MNF. Manifestus.
MNM. Manumissus.
M. O. P. Marito obsequens posuit.
M. P. II. Millia passuum duo.
M. S. Manu scriptum, memoræ sacrum.
M. S. P. Memoriæ suæ posuit.
M. T. C. ve M. IVL. CIC. Marcus Tullius Cicero.
MV. MN. MVN. MVNIC. Municipium *vel* municeps.
M. VI. Mensibus sex.
MVL. B. Mulier bona.
MVL. M. Mulier mala.
MVL. P. Mulier pessima.

N. Neptunus, Numerius, Numeria, Nonius, Nero, nam, non, natus, natio, nefastus, nepos, neptis, niger, nomen, nonæ, noster, numerarius, numerator, numerus, nummus *vel* numisma, numen.
NAT. Natalia, natio *vel* natione.
NAV. Navis *vel* navibus.
N. B. Numeravit bivus *pro* vivus.
NB. *vel.* NBL. Nobilis.
N. C. Nero Cæsar, ve Nero Claudius.
N. C. C. Non calumniæ causâ.
NEG. *vel* NEGOT. Negotiator.
NEP. Nepos.
NEP. S. Neptuno sacrum.
N. F. C. Nostra fidei commissum.
N. F. N. Nobili familiâ natus.
N. H. Notus homo.
N. L. Non liquet, non licet, non longè, nominis Latini.
N. M. Nonius Macrinus, non malum, non minus.
NN. Nostri.
NNR *vel* NR. Nostrorum.
NO. Nobis *vel* nostrum.
NOBB. Nobilibus.
NOB. G. Nobilis generatus, *seu* nobilis genere.
NOB. FN. Nobili familiâ natus.
NOBR. November.
NON. AP. Nonis Aprilis.
N. P. Nihil potest.
NQ. Numque, nusquam, nunquam.
NR. Noster.
N. V. N. D. N. P. O. Neque vendetur, neque donabitur, neque pignori obligabitur.
NVP. Nuptiæ.

O. Officium, optimus, olla, omnis, optio, ordo, ossa, ostendit, &c.
OB. Obiit, Obriacum, *vel* Obreziacum, orbem, obitur.
OB. C. S. Ob cives servatos.
OB. M. E. Ob merita ejus.
OB. ME. P. E. C. Ob menta pietatis et concordia.
O. B. O. Omnia bona.
OCT. Octavianus, October.
OD. Ordo.
O. E. B. Q. C. Ossa ejus benè quiescant condita.
O. H. F. Omnibus honoribus functus.
O. L. Opera locavit.
OM. Omnium.
O. M. Optimus maximus.
OMA. Omnia.
OMIS. Omnibus.
ONA. Omnia.
ONT. IMP. Ornamentum imperiale.
OO. Omnes, omnino, oportuit, oportebit.
O. O. Optimus ordo.
OP. ABS. Opus absolutum.
OP. Oppidum, opiter, oportet, optimus, opus.
OR. Ornamentum, ornato *vel* ordo.
ORB. PAR. Orbati parentes.
ORD. Ordo, ordinis.
OR. M. Ordo militum.
O. V. D. Omni vertuti dedito.
O. V. B. F. Optima viventi fecit.

P. Publius, passus, patria, pecunia, pedes, perpetuus, pius, plebs, populus, pontifex, posuit, potestas, præses, prætor, pridiè, pro, post, provincia, puer, publicus, publicè, primus, &c.
PA. Pater, patricius *vel* pater patriæ *vel* pater patratus.
PACE. P. R. Pace populo Romano.
PD. *vel* PA. DIG. Patriciabus dignitas.
PAE. ET. ARR. COS. Pæto et Arrio consulibus.
P. A. F. A. Postulo an fias auctor.
PAR. Parens, parilia. Parthicus, parentum.
PAT. Patricius.
PAT. PAT. Pater patriæ.
PBLC. Publicus.
PC. Procurator.
P. C. Pactum conventum, *vel* pecunia constituta.
P. C. Post consultum, patres conscripti, patronus colonæ, ponendum curavit, præfectus corporis, pactum conventum.
P. D. Publicè dedit.
PEC. Pecunia, *vel* peculium.
PED. CXVS. Pedes centum quindecim semis.
PEG. Peregrinus.
P. F. Pater familiâ.
P. H. C. Publicus honor curandus.
P. II. ∞. L. Pondo duarum semis librarum.
P. II. ⁝ Pondo duo semis et triente.
PICEN. Piceni.
PIEN. Pientissimus.
P. KAL. Pridiè Kalendas.
POM. Pompeius.
PON. MAX. Pontifex maximus.
POP. Populus.
POSTH. Posthumus.
P. P. P. C. Propria pecunia ponendum curavit.
P. Q. Post quam.
P. R. Populus Romanus.
PR. Prætor.
PR. PR. Præfectus prætorii.
P. R. C. A. DCCCXLIIII. Post Romam conditam annus octingentis quadraginta quatuor.
PRÆ. VRB. Pæfectus urbis.
PRÆ. PRÆS. Præfectus præsidii.
PRO. *vel* PROCOS. Proconsul.
P. PR. Pro-prætor.
P. PRR. Proprætores.
PR. N. Pro nepos.
PR. NON. APR. Pridiè nonas Aprilis.
PRID. KAL. *vel* K. Pridiè Kalendas.
PRS. Præses.
PRSS. Præsides *vel* Prætores.
P. R. V. X. Populi Romani rata decennalia.
PS. Passus, plebiscitum.
P. S. Posuit sibi.
P. S. F. C. Publica saluti faciendum curavit, *vel* publico, *vel* proprio sumptu faciendum curavit.
PVB. Publicus.
PUD. Pudicus, pudica, pudor.
PUR. Purpureus.

Q. Quinquennalis, quartus, quintis, quando, quantum, qui, quæ, quod, Quintus, Quintius, Quintilianus, quæstor, quadratum, quæsitus.
Q. B. AN. XXX. Qui bixit, *id est* vixit, annos triginta.
Q. B. F. Quare bonum factum.
Q. B. M. V. Quæ benè mecum vixit.
Q. F. Quinti filius.
Q. L. Quinti libertus.
QM. Quomodo, quem, quoniam.
QN. A. N. N. Quandoque neque ais neque negas.
QQ. Quinquennalis.
QQ. V. Quoquo versum.
Q. R. Quæstor reipublicæ.
Q. V. A. III. M. N. Qui *vel* quæ vixit annos tres, mense.
QV. Quartus.
QVIR. Quirites.

R. Roma, Romanus, rex, reges, Regulus, rationalis, Ravennæ, recta, recto, requietorium, retro, rostra, rudera, &c.
RC. Rescriptum.
R. C. Romana civitas.
R. D. Regis domus.
REF. C. Reficiendum curavit.
REG. Regio, *vel* regi.
REI. M. Rei militaris.
R. P. RESP. Respublica.
RET. P. XX. Retro pedes viginti.
REC. *vel* REQ. Requiescit.
REG. F. Regis filius.
RMS. Romanus.
ROB. Robigatia, Robigo.
RS. Responsum.
RVF. Rufus.

S. Sacrum, sacellum, scriptus, semis, senatus, sepultus, sepulcrum, sanctus, servis, serva, servius, sequitur, sibi, situs, solvit, sub, stipendium, &c.
SAC. Sacerdos, sacrificium.
SÆ. *vel* S.ÆC. Sæculum, sæculares.
SAL. Salus.
S. C. Senatus consultum.
SCI. Scipio.
S. D. Sacrum diis.
S. EQ. Q. O. ET. P. R. Senatus, equesterque ordo et populus Romanus.
SEMP. Sempronius.
SER. Servius, Sergius.
SEX. Sextus.
SL. SYL. SYL. Sylla.
S. L. Sacer ludus, sine linguâ.
S. M. Sacrum manibus, sine manibus, sine malo.
SN. Senatus, sententia, sine.
S. O. Sine occasio.
S. P. Sine pecunia.
SP. Spurius.
S. P. Q. R. Senatus populusque Romanus.
S. P. D. Salutem plurimam dicit.
S. T. A. Sine *vel* sub tutoris auctoritate.
SLT. Scilicet.
S. E. T. L. Sit ei terra levis.
SIC. V. SIC. X. Sicut quinquennalia, sic decennalia.
SSTVP. XVIIII. Stipendiis novem decim.
ST. XXXV. Stipendiis triginta quinque.

T. Titus, Titius, Tullius, tantum, terra, tibi, ter, testamentum, titulus, terminus, triarius, tribunus, turma, tutor, tutela, &c.
T. A. Titus annus *vel* tutoris auctoritate.
TAB. Tabula.
TABVL. Tabularius.
TAR. Tarquinius.
T. AVG. Tutela Augustæ.
TB. D. F. Tibi dulcissimo filio.
TB. PL. Tribunus plebis.
TB. *vel* TI. *vel* TIB. Tiberius.
T. F. Titus Flavius. Titi filius.
THR. Thrax.
TI. F. Tiberii filius.
TI. N. Tiberii nepos.
TIB. CS. Tiberius Cæsar.
TIB. CL. Tiberius Claudius.
T. L. Titus Livius. Titi libertus.
TIT. Titulus.
TM. Tantum terminis, thermæ.
T. M. Terminis, thermæ.
T-M. P. Terminum posuit *vel* terminus positus.
TM. D. D. Terminum dedicavit, *vel* dedicante *vel* thermæ dedicatæ.
TR. PO. Tribunitia potestas.
TRAJ. Trajanus.
TR. ÆR. Tribuni ærarii.
TRV. CAP. Triumviri capitales.
TRV. MON. Triumviri monetales.
TUL. Tullus *vel* Tullius.
TR. V. Triumvir.
TT. QTS. Titus Quintus.
Θ *vel* TH. AN. Mortuus anno.
ΘXIII. Defunctus viginti tribus.
⋈
TVL. Tullius.
TVL. H. Tullius Hostilius.
TVR. Turma.

V. Quinque, quintò, quintùm.
V. Vitellius, Volera, Volero, Volusus, Vopiscus, vale, valeo; Vesta, vestalis, vestis, vester, vesteranus, vir, virgo, vivus, vixit, votum, vovit, urbs, usus, uxor, victus, victor, &c.
V. A. Veterano assignatum.
V. A. I. D. XI. Vixit annum unum, dies undecim.
VAL. Valerius *vel* Valerianus.
VAL. CS. Valerius Cæsar.
V. A. L. Vixit annos quinquaginta.
VAT. Vates *vel* vatum.
VB. Viro bono.
V. B. A. Viri boni arbitratus.
V. B. F. Vir bonæ fidei.
V. C. Vale conjux, vivens curavit, vir consularis, vir clarissimus, quintum consul, usu capio, urbis condita.
V. D. Vivus dedit.
V. CC. Voluerunt consules.
V. D. A. Vale dulci amico.
V. DD. Voto dedicatur.
VDL. Videlicet.
V. DICT. Vir dictatorius.
V. D. N. V. Vale decus nostræ urbis.
VE. Verba.
V. E. Vir egregius *aut* excellens, visum est, verum etiam.
VESP. Vespasianus.
VET. Veteranus *vel* Vetaria.
VET. AVG. N. Veteranus Augustus nostri.

VET. LEG. S. Veteranus legionis secundæ.
VIC. Victores, victor, *vel* victoria.
VI. V. Sextum-vir.
VII. V. Septem-vir.
VIII. VIR. Octum-vir.
VII. VIR. EPVLO. Septem-vir Epulonum.
VIX. A. FF. C. Vixit annos fermè centum.
VIX. A. LIIX. Vixit annis quinquaginta octo.
VIX. AN. ⋊. Vixit annos triginta.
VIX. A. III. M. XI. D. XV. Vixit annis tribus, mensibus undecim, diebus quindecim.
ULPS. Ulpianus, Ulpius.
VL. Videlicet.
V. M. Vir magnificus, vivens mandavit, volens merito.
VM. Vestrum.
V. MUN. Vias munivit.
V. N. Quinto nonas.
V. N. V. Viro nostro urbis.
VOL. Volcania, Voltinia, Volusus.
VONE. Bonæ.
VOT. V. Votis quinquennalibus.
VOT. V. MULT. X. Votis quinquennalibus, multis decennalibus.
VOT. X. Vota decennalia.
VOT. XX. *vel* XXX. *vel* XXXX. Vota vicennalia, aut tricennalia, aut quadragenalia.
V. R. Urbs Roma, votum reddidit.
VV. CC. Viri clarissimi.
UX. Uxor.

X. Decem, denarius.
X. AN. Annalibus decennalibus.
X. P. Decem pondo, *vel* decem pedes.
X. R. OCT. Decimo Kalendas Octobris.
X. M. Decem millia.
X. P. Decem pondo.
X. V. Decimvir.
XV. VIR. Quindecimvir.
XV. Quindecim.

Among the best books on the manner of reading and deciphering the inscriptions of the Romans, a subject so useful to the architect and antiquary, are M. Valerii Probi, *de Notis Romanorum interpret.* which may be found at page 1494 of Putchen's Grammar. This treatise has also appeared in a separate form at Venice in 1499, and 1518 in 4to. and at Paris in 1510 in 8vo. *Traité des Inscriptions*, par *Jacq.* Ravenau, Paris, 1666, in 12mo. *Discours sur le Style des Inscriptions*, par Boileau. *De Stylo Inscriptionorum latinarum, libri III. a* Stef. Ant. Morcelli, Rome 1780, in folio. This excellent work also contains examples of inscriptions and abbreviations, both ancient and modern. *Alphabetum Tironianum; sive, Methodus Notus Tironis explicandi;* a D. P. Carpentier, Paris, 1747, in fo. with plates, and the third vol. Fabricii *Bibliotheca latina*, lib. ii. c. ix. vol. ii. page 113.

See also Inscription, Hieroglyphic, Lapidary, Numismatics, &c.

Abolla. (ἀμβολὴ, or ἀναβολὴ, Gr. *abolla*, Lat.) *In costume.* An ancient military garment worn by the Greeks and Romans. It is also used by some authors, for the cloak worn by senators and philosophers, and named (à bullâ) from the bullæ with which they were decorated. There is great variance in the opinions of critics and antiquaries as to the form and varieties of this garment. By some it has been thought to be a species of *toga* or gown; by Nonnius and others a kind of *pallium* or cloak. Varro and Martial consider the *toga* to have been a garment of peace; while the *Abolla* was generally a part of the camp equipage. There seem to have been various kinds of *abollæ*, appropriated to different degrees of persons. Kings appear to have used it; for Caligula is said to have been offended with Ptolemy for appearing at the public games in a purple *Abolla*, which attracted the public attention from the jealous tyrant.

Abraxas or Abrasax. (ἀβραξας, Gr.) *In archaiology.* A cabalistic compound word, denoting a power which presides over 365 others, the number of days in a year; made up according to the Grecian numeration of the following letters: α 1, β 2, ρ 100, α 1, ξ 60, α 1, ς 200, which added together make the mystical number 365. This word was used as an amulet or charm by the disciples of Basil, father of the monks of Pontus and others of his sect. It is also appropriated to a sculptured stone on which the word is engraven, and sometimes the names of saints, angels, gods, and even that of Jehovah himself. It is believed that the *Abraxas* originally came from Egypt, and that specimens as old as the third century are still extant.

By this name are also known a description of small statues, sculptured gems, and stones, with the word *Abraxas* engraved on them, and ornamented with figures of Egyptian divinities, combined with Zoroastical and Judaical symbols, and a whimsical combination of Greek, Phœnician, Hebrew, and Latin letters, without any apparent meaning. They were used as amulets, and were supposed to have great efficacy in driving away flies. They are mostly of a coarse and ill designed workmanship, and are supposed by some critics and antiquaries not to be of higher antiquity than the time of the Gnostics and Basilidians in

the reign of Hadrian. In the Royal Library at Paris there are several specimens of *Abraxas*, as well as in many private and public collections in England. MACARIUS and CHIFLET have published treatises on them; and the work of the latter has numerous representations of them correctly engraved. MONTFAUCON has also contributed to the knowledge of this subject, by numerous republications of and additions to former works.

If the *Abraxas* originally came from Egypt, as is believed, it may be regarded not only as a curiosity fit for the cabinet, but as one of those rich spoils of time which may illustrate the history of that country.

ABSIS. *In architecture.* See APSIS.

ABSORBED. (*absorptus*, Lat. *absorbé, embu*, Fr.) *In painting.* Sucked or swallowed up, sunk in, imbibed. The French critics apply this epithet to a picture, when such a portion of the oil has evaporated or sunk into the canvass or ground on which it is painted, that it leaves the colour flat and the touches indistinct. To remedy this defect, the picture should be well cleaned, rubbed over with a coating of lubricous oil, and varnished. The term is nearly synonymous with our picture dealers' phrase, "chilled," or "sunk in."

ABSORBENT GROUNDS, are picture grounds prepared either on board or canvass, to have the power of drying up or imbibing the redundant oil from the colours, for the sake of expedition, or to increase the brilliancy of the colours: but being mostly prepared with destemper or water colour mixture, they are not reckoned so durable as cloth or panel prepared in oil.

ABUTMENT. (*abuttan*, Sax. from Boϑa.) *In architecture.* The extremities of an arch or bridge. The abutments or butments of a bridge are the extremities by which it is joined to the main land or sides of a river, and are sometimes natural, and sometimes artificial. Natural abutments are rocks sufficiently high on the banks of a river; or solid earth, masonry, &c. to resist the drift or shoot of the arch or series of arches, according to the disposition of the place and the wants of the bridge. These must be made secure, immoveable, and rather more than sufficient to resist the drift of the adjoining arch; for if ever obedience to the motto, "*A little stronger than strong enough*" be requisite, it is in the selection or construction of the abutments of a bridge.

For the mathematical principles on which they should be constructed, the student is referred to the article "*Bridge*" in the ENCYCLOPÆDIA METROPOLITANA, and to the works of the various architects and mathematicians who have written on bridge building, as PALLADIO, BELLIDOR, &c.; DR. HUTTON'S *Mathematical Dictionary*; *The Principles of Bridges*, &c. by C. HUTTON, F.R.S. LONDON, 1801. *A Treatise on the Properties of Arches and their Abutment Piers, &c. &c. with plates, by* SAMUEL WARE, *Architect*, LONDON, 1809. *Tracts on Vaults and Bridges*, by the same author, 1822. Short *Principles for the Architecture of Stone Bridges*, &c. *with plates, by* STEPHEN RIOU, *Esq. Architect*, LONDON, 1770. *A Treatise on Building in Water, by* GEORGE SEMPLE, DUBLIN, 1776. *Geometry applied to Building, by* BATTEY LANGLEY, *Architect*, LONDON, 1726. *Essay on Bridge Building, by* JAMES SAVAGE, published in the *Essays of the London Architectural Society*, LONDON, 1808; *Essay on Foundations, by* JAMES ELMES, M.R.I.A. published in the same volume, &c. &c. &c.

ACACIA or AKAKIA. (ἀκακία, Gr.) *In archaiology.* Something resembling a roll or bag, seen on the medals of the Greek and Roman emperors from the time of Anastatius. Critics and antiquaries are at variance concerning the *Acacia*, some thinking it a handkerchief to be used as a signal, others taking it for a roll or volume of writings or petitions; and others as being a bag filled with earth to remind them of their mortality.

ACADEMY. (ἀκαδημία, Gr. *academia*, Lat. *académie*, Fr.) An assembly or society of persons associated for the promotion of any art or science; so called from the public school, garden, villa, or grove in the immediate vicinity of Athens, called ἀκαδεμία, which was built by Cadmus the Phœnician, or, as some say, by Academus a philosopher. In the language of the arts, those places are called academies in which students are instructed in the arts of design. In what is commonly called an academy of painting, *painting*, properly so called, is seldom taught; drawing or design, which is the basis of the art, is more properly the duty of the student. An academy of arts, to be complete, should have in its establishment a certain number of approved masters, who are called professors, and whose business it is to instruct the students in the different branches of science, necessarily connected with the arts of design; but principally in a well grounded knowledge of the human figure, which is indispensably necessary to the painter, the sculptor, and the engraver, and not totally unnecessary to the architect.

The knowledge of the bones and principal muscles of the human body is absolutely necessary to forward the arts of design; and without a knowledge of perspec-

tive, it is impossible to execute either an historical subject, or even a landscape, with any certain degree of truth. In an academy there should be *professors of anatomy and perspective*, besides the more apparently necessary ones of *painting*, of *sculpture*, and of *architecture;* which last should not be slighted by the painter, as he often has to introduce buildings in his pictures. These professors should instruct the students not only in the theoretical rules of art, but also in the practical. To make such an establishment perfect, there should be added *a professor of antiquities, and of ancient literature*, to explain the customs, the manners, and the costume of different ages and of different people; *professors of geometry and the mathematical sciences; of the character and expression of the passions*, who should unite the task of characteristic grouping of the figures (see GROUP) with pictorial taste; nor should there be omitted in a complete academy of arts a *professor of history and historical literature*, as connected with the *fine* arts.

Such an establishment should undoubtedly possess a good and sufficient library of books, particularly of designs. The younger students should be instructed in drawing at large from good originals, either drawn or engraved, the different portions of the human body, as heads, eyes, noses, ears, and at length entire figures, to use them to the exercise of the portcrayon. They should then be instructed in the art of drawing from plaster models, or other detached statues.

For such purpose, an academy should have a collection of casts or originals, of the best and most celebrated of the ancient and modern sculptors, to form the eye and taste of the students, and to teach them the art of distributing the lights and shadows, and the different portions of the human body in single figures or in groups.

An academy should also be provided with living models of different characters, both male and female, for the more advanced students, which the professor should place on an elevated platform, in such positions as he thinks proper. Here it may be right to observe, that it will be preferable to inform the model of the intended position that he may place himself in it with ease, rather than to move his limbs to the position. This is generally called setting the model. When the model is set, and the students seated round in the most advantageous forms (which places the students again resume till they have finished their drawings), the professor should examine occasionally each pupil's drawing, and point out to him its defects, and at the same time direct him where he appears to be at a loss. When the model is placed at night, the light should be fixed in such a manner as best to imitate the broad clear light of the sun, that the shadows may be thrown clear and distinct, and should be properly concealed from the eyes of the students. The drawings generally made on these occasions are on a coloured paper, of a middle tint, the lights raised by white, and the shadows lowered by black or red chalks. Some artists have of late in the model academy, at Somerset House, introduced the practice of painting in black and white, and some in the natural colours from the living model, not only in the day time, but by lamp light. To render an academy of painting complete, there should be attached a good picture gallery, as a school of colouring and painting; and a collection of prints after the best masters, as examples of distribution, grouping, light, shade, expression, &c. Although an academy may not at its first establishment have all these requisites at command, yet they may obviate many difficulties, by procuring access to celebrated galleries for the students, by means of admission tickets.

In some academies, to a school of design or drawing, is added an academy of artists, that is to say, a society of men distinguished for their abilities in the arts, under the patronage and protection of the government of their country; where the primary intention is not so much the elementary instruction of pupils, as the encouragement and patronizing youthful artists, already instructed in the first principles of art. Of such a description is the Royal Academy of London. Others on the continent, to a similar establishment, add that of a society for the encouragement of arts and able artists, and of procuring treatises, lectures, and able disquisitions on the arts. The members meet at stated times for the purpose of conferring on objects interesting to and connected with the arts, and reciprocally communicate their observations, sentiments, and discoveries, in the course of their practice, or results of their experiments. There has not yet been an academy of arts conducted on the same plan as academies of sciences, although such an establishment would be eminently useful.

The Venetian painters were the first that formed a regular association for the study of the arts, erecting a society under the name and patronage of St. Luke in 1345. They did not assume the name of an academy, but satisfied themselves with the

title of "*The Society of St. Luke, founded at Florence*, 1350."

This society was greatly encouraged by the government, and taken under the especial patronage and protection of the illustrious house of the Medici. GEO. NELLI founded also at Florence, in 1758, an academy of architecture. Italy, besides, possessed several academies of painting: that of Rome established by FED. ZUCCHERO in 1593, suspended in 1599, on the death of FLAMVACCA, and reestablished in 1715. The academy of arts of Milan generally attribute its formation to Leonardo da Vinci, who died in 1540; but it appears from authentic documents to have existed prior to the birth of that great painter. That of Bologna was founded 1712; of Parma in 1716, and remodeled in 1760; that of Padua in 1710; of Mantua in 1769, under the title of the Theresian Academy; that of Turin was founded in 1777; and the French academy of painting at Rome in 1666; and several others less known. In France, Louis XIV. founded at Paris the Royal Academy of Painting in 1648, and the Royal Academy of Architecture in 1671. Ever since the year 1391, the painters at Paris had established themselves into a society called the Academy of St. Luke, which had many privileges granted to them and confirmed at various periods, by different kings of France.

In 1781, there was one established at Bordeaux; the success or attainments of which I cannot learn. In Spain there was an academy of painting established at Madrid in 1752, which produced many eminent painters. (*Vide* SCHOOL.)

In Great Britain the arts flourished in a variable manner, from a grand attempt at fixing them in the kingdom by Charles I., till the establishment of an academy at Edinburgh in 1754, which is not at present in being. This attempt was succeeded by an association of artists in London in 1760. But we had no regular academy till the year 1768, when King George III. approved of a plan for the establishment of the Royal Academy, which has met with a considerable degree of success, and is now in a flourishing state. (*Vide* ENGLISH SCHOOL.)

For more ample particulars of this academy, *see* PRINCE HOARE'S "*Inquiry into the present State of Arts of Design in England, London*, 8vo. 1806," under the head of "*The Establishment, Design, and Progress of the Royal Academy of Arts; and of its Annual Exhibitions.*" Also "*Academic Annals of Painting, Sculpture, and Architecture, published by Authority of the Royal Academy of Arts; collected and arranged by Prince Hoare, Secretary for Foreign Correspondence to the Royal Academy. London*, 4to. 1809." Several other establishments have been founded in Great Britain for the encouragement of the Fine Arts; the principal of which are, the Society for the Encouragement of the Arts, &c. in the Adelphi; the Northern Society for the Encouragement of the Fine Arts at Leeds; the British Institution for promoting the Fine Arts in the United Kingdom, held in Pall Mall, where they have a spacious gallery and an excellent school for colouring, besides an annual exhibition and sale of the works of British Artists; the Architectural Society, &c.; a similar society and annual exhibition at Bath; one in Scotland; an Academy of Arts in Dublin, in 1753; and the newly formed Society of British Artists, who meet and have exhibitions of their works at their new and spacious galleries in Suffolk Street, Pall Mall East, designed by Mr. Elmes in 1823; besides others of smaller consequence at Liverpool, Leeds, and other large commercial towns.

There were formerly in the Low Countries academies of arts at Ghent, Bruges, Antwerp, &c. Amsterdam has also a good school of design, which was erected into a royal academy, by Louis Buonaparte when King of Holland; and at Brussels was founded an academy of polite arts in 1770. In Denmark the academy of polite arts at Copenhagen was founded in 1738, but it was not till 1754 that it obtained a confirmation of its privileges, and an acknowledgment from the crown. The imperial academy of St. Petersburg was founded in 1757, remodeled and improved in 1764. In Germany the principal academies of the fine arts are, that of Nuremburg, which is reckoned to be the most ancient in that country, having been founded in 1662; the academy of arts at Berlin was founded in 1694, finally constituted an academy in 1699, and reestablished in 1786; that of Dresden, founded in 1697, and united to that of Leipsig in 1761; that of Augsburgh, founded in 1712, and revived with additional strength in 1779. Besides these, the Emperor Joseph I. founded that of Vienna, which was finally established by Charles VI. in 1726; that of Manheim, founded in 1757; the academy of Stutgard, founded in 1761, and united to that of Charles in 1776; that of Munich, founded in 1770; that of Cassel in 1775; and that of Weimar in 1781; and there are few cities of Germany but have schools of design as

preparatory to the greater academies of ARTS.

Upon the utility of academies or gratuitous schools for instruction in the arts, the best works are as follows: "*Sur l'Utilité de l'Etablissement des Ecoles gratuites,*" by DESCAMP, PARIS, 1768. "*Essai Philosophique sur l'Etablissement des Ecoles gratuities de Dessin,* by ROZOI." The third volume of the work of M. DE RAMDOHR, intitled "*Uber Mahlerei und Bildhauerkunst in Rom.*" (On the Sculpture and Painting of Rome.) Leipzig, 1807. The before cited work of MR. PRINCE HOARE. "BARRY'S *Letter to the Dilletanti Society,*" since published in a collection of his works, 4to. by Cadell and Davies, London, 1809. "ROBERTSON *on the Fine Arts,*" 4to. London, 1784. "*A Letter on the Subject of Encouragement of the Fine Arts, by* JOSIAH BOYDELL, *Esq.*" printed in London but not published, &c. &c. &c.

ACADEMY FIGURE. *In painting.* A drawing or painting in light and shade, made after a living model, regulated by the rules and orders of an academy.

ACANTHUS. [ἄκανθος, Gr. *acanthus,* Lat. *acanthe,* Fr.] *In architecture.* An ornament representing the leaves of the herb bear's breech, which are large and shaggy. It was at first used by the ancients as an ornament to friezes and cornices, and at length to the other members of architecture, but is principally employed as the grand ornament of the *Corinthian and composite capitals.* (*See* those articles.) The Greeks used for this purpose the leaves of the cultivated acanthus (*acanthus mollis*), commonly called brank ursine or bear's breech, from its shagginess, which grew spontaneously both in Greece and Italy. The gothic architects and sculptors, on the contrary, have used the wild and prickly acanthus (*acanthus spinosa*), being smaller in its parts, and more suited to the littleness of their styles of art. Although architecture has made the greatest use of the acanthus, yet the other arts have also adopted it as a chaste and splendid decoration. We find among the ancients, as well as among the moderns, various instruments, household furniture, and utensils, ornamented with leaves of the acanthus. These artists, in preserving the general form and character of the plant, have made their sinuosities and curves more or less prominent to suit their purposes, and have thus given them a more sculpturesque effect. In the Corinthian capital they are executed with more fidelity and elegance: the whole plant surrounds, with its aspiring leaves, the vase or bell of the capital, as if attempting to lift up the abacus that covers the whole; they then turn down and form themselves into graceful volutes.

Ancient authors mention statues as having been carved from the wood of the *acanthus.* But we must not thereby understand that they meant this acanthus, which is not a ligneous plant. M. Heyne has conjectured, with much probability, that it is a species of the *acacia (robinia)* that is spoken of, but it is still a matter of doubt.

The ancients also called by this name the embroidered borders that were used as edgings to their draperies, which, as the name implies, imitated the leaves of the acanthus.

ACANTHINES. [from the above.] *In costume.* Garments made of the fibres of the acanthus. The Romans also gave the name of *acanthinæ vestes,* or according to Varro *vestimenta acanthina,* to those garments that were ornamented with acanthus leaves. The words *acanthines* and *acanthinæ* are also applied by Latin authors to draperies, vases, borders, or any other things that were thus ornamented. The borders of ancient Greek vases are often seen decorated with this kind of ornament.

ACCALIA. *In archaiology.* Also called *Laurentalia.* Solemn festivals held in honour of ACCA LAURENTIA, the wife of Faustulus, and the nurse of Romulus and Remus, who died rich, and left the commonwealth her heir; wherefore she was honoured with a holiday and sacrifice, in commemoration of this benefaction and the protection which she afforded to the founder of the Roman state, and of an annual custom she had once a year of making a solemn sacrifice for a blessing upon her fields. Her twelve sons always assisting at the ceremony. At last having the misfortune to lose one of the number, Romulus, to show his gratitude and respect, offered himself to fill up the number in his room, and gave the company the name of *Fratres Arvales.* Their duties were to go in procession praying for the increase of corn, and were also judges of controversies concerning land. This order was in great repute at Rome, they held the dignity always for their lives, and wore on their heads crowns made of ears of corn. *Vide* PLIN. i. 17. c. 2. *Pomp. Læt. de Sacred.* LIVY, lib. i. PLUTARCH'S *Life of* ROMULUS, &c.

ACCESSORIES. [*accessorius,* Lat. *accessoire,* Fr.] *In painting.* Additionals. Every thing that enters into a composition of art, without being indispensably necessary, is called an accessory. In an historical picture,

the figures which act are the *principal* objects: they give the idea of the action which the painter figures to himself; the rest are *accessories*.

The artist who aspires to rise above mediocrity should, above all things, be extremely reserved in the use and choice of *accessories* in his picture; he should use and place them in such a manner as not to hinder or spoil the effect of the principal group, with which they should always agree, and at the same time assist the general effect.

The most skilful painters and sculptors of antiquity have avoided accessories in their designs, that the eye might not be diverted by them from the principal figure or group; and a modern artist would do much better to omit them altogether than to introduce them improperly. Nothing is more insupportable to the true connoisseur than to see designs crowded with accessories, which have no connection with the principal object, or where they are introduced only to fill up and hide the vacuity and emptiness of the principal subject; they disgrace the name of accessories, and should only be regarded as useless supernumeraries, pressed into a service (they seriously injure) without judgment or discretion.

Accidental. [*accidentalis*, Lat. *accidental*, Fr.] *In painting*. Casual, fortuitous, happening by chance; nonessential. *Accidentals* or accidents in art are various; in painting *accidental lights* are those fortuitous effects which, occasioned by rays of light falling casually on certain objects, render them more bright and luminous than usual, and produce a strong and marked opposition to the shadows, which are rendered apparently still darker by contrast. These accidental circumstances generally produce brilliant and imposing effects if properly managed. Rembrandt above all other painters made the most use of them, and they are with many critics and amateurs of his works, the principal, if not the sole cause of their admiration.

It is of the greatest service for the young painter to know how to apply his accidental lights properly and with truth; and should be a main object of his study. A vaulted cavern partly open, through which the sun darts his rays, and discovers to the spectator certain objects in the back ground; a thick and almost impervious forest, wherein a few rays of light pierce through the foliage, and discover the herbage, the plants, and the water, are among those accidental circumstances that produce an agreeable effect. In marine subjects, when the painter represents an approaching storm, he has an opportunity of catching a number of varied accidental circumstances, which may result either from the sun veiled by clouds, or from the disorder of the elements, and other circumstances incidental to the scene. Inundations, conflagrations, volcanic irruptions, interiors of founderies, and such like subjects, such as De Loutherbourg, Wright of Derby, and Pether delighted in, offer advantages of accidental lights, very attractive to the admirers of such phænomena. Uncommon effects borrowed from romance, from commonly received fables, from facts of which the resemblances appear supernatural, also furnish advantageous and picturesque subjects of *accidentals*. As do also the sudden and accidental lights produced by the appearance of spectres, demons, or apparitions. The late Mr. West's picture from Pope's elegy on the death of an unfortunate lady, from these words:—

> "What beck'ning ghost along the moonlight shade
> Invites my steps and points to yonder glade;
> 'Tis she! but why that bleeding bosom gored,
> Why dimly *gleams* the visionary sword."

is again a subject fitted for these accidental introductions.

The borrowed light which Raffaelle has used in his celebrated picture of the Transfiguration, the light emanating from the body of the *Bambino* or infant Christ, in the celebrated notte of Coreggio, are also fine examples of a just use of them; and so is the same subject in Sir Joshua Reynolds's picture in the window of New College Chapel, Oxford; which are all specimens of a judicious introduction of accidental lights and effects. To these supernatural accidents of light and shade we may add the effects produced by natural accidental lights, which are accessory to the picture; such as from a candle, a flambeau, or a forge, or by the ingenious interposition of any object that may be supposed naturally introduced.

A study of these subordinate or mechanical effects is of importance to the painter of still life and portraits.

Accidental point, in *perspective*, is a point on the horizontal line, where certain lines parallel in themselves and to each other but not to the principal object in the picture converge. An accidental point may, from the position of the object represented, be other than in the horizontal line. See Perspective.

Acclamation. [*acclamatio*, Lat.] *In archaiology*. A representation in sculpture

or on medals, wherein the people are represented as expressing their joy in the posture of acclamation; which was an honour held in high esteem by the Romans, and thought deserving of record. Acclamations differed from applauses, by the former being always vocal, and conferred on the parties whether present or absent: but applauses were expressed by the hand, and only towards those who were present. Those acclamations which expressed grateful and benevolent feelings were called *laudationes*, and *bona vota*; acclamations of reproach were denominated *execrationes* and *convicia*. The medals on which laudatory acclamations are recorded are called by antiquaries acclamation medals. See MEDALS.

ACCOMPANIMENTS. See ACCESSORIES.

ACERRA. [Lat.] *In archaiology*. An altar set up by the Romans near the body of a deceased person, on which incense was daily burned with religious ceremonies till the time of performing the funereal rites. It is also the ancient name of a small coffer or pot which contained the incense and perfumes to be offered on the altars of the gods, and before departed persons. The Romans were obliged to offer incense in proportion to their estate and condition; the rich in large quantities, called *acerra plena*, the poor only a few grains. Both descriptions of acerræ were anciently used, and are often found sculptured as decorations to the friezes of temples.

ACLIDES. [Lat.] *In archaiology*. Missive weapons used by the Roman soldiery. The *aclis* was a kind of sharp javelin with a thong fixed to it, whereby it may be drawn back again. Scaliger describes it as roundish or globular, of a clublike form, with a wooden stem to poise it with.

ACONTIUM. [*ἀκοντίας*, Gr. *acontias*, Lat.] *In archaiology*. A kind of javelin or dart, resembling the Roman pilum, and so named from its similarity to the acontias or dart snake.

ACORN. [from Aac, an oak, Sax. *gland*, Fr.] *In architecture*. The fruit or seed of the oak. Imitations of this fruit are much used in modern architecture, and also formerly in Greek and Roman costume formed of gold or gilt metal and suspended at the extremities of their vestments and girdles. The Greeks wore them at the end of the chlamys, and called them when thus used *ῥοΐσκοι*.

ACOUSTICS. [*ἀκόστικὰ*, Gr. *acoustiques*, Fr.] *In architecture*. The science which treats of the doctrine or theory of sounds. The etymon *ἀκέω* (I hear) demonstrates both its meaning and its derivation. This science, though not entirely relevant to the fine arts, is of the utmost consequence to the architect, in the construction of music rooms, theatres, &c. Its laws are best obtained from the various books on natural and experimental philosophy.

ACROLITHES. [*ἀκρόλιθος*, Gr. *acrolithe*, Fr.] *In architecture and sculpture*. A statue, the extremities of which are stone. According to Trebellius Pollio, Calpurnia erected in the temple of Venus an acrolithean statue, gilt. And Vitruvius, after speaking of the palace which Mausolus, King of Caria, built at Halicarnassus, adds, that he had a temple dedicated to Mars, and that he erected an acrolithean statue therein to the honour of that god.

ACROPOLIS. [from *ἄκρος* highest and *πολίς* a city.] *In architecture*. A city on the highest summit of a hill. By this name is called the citadel or highest part of the city of Athens, which is built on an eminence accessible only on one side, called *polis*, because it constituted the original city; and the *upper polis* to distinguish it from the lower, which was afterwards built round it in a large open plain. On the north side was a wall, built by the Pelasgi, and called Pelasgia; and another on the south constructed by Cimon the son of Miltiades, out of the Persian spoils. From its nine gates it was called *Enneapylon*, the ascent to which was by a magnificent flight of steps of white marble, built by Pericles. In this part of the city was the beautiful temple of Minerva, called Parthenon. (See PARTHENON.) For further descriptions of the acropolis see WILKINS's *Atheniensia*; STUART's *Athens*; WILLIAMS's *Greece*; ELMES's *Lectures on Architecture*, and other similar works.

ACROTERIA. [*ἀκροτήριον*, Gr. *acroterium*, Lat.] *In architecture*. Small pedestals without bases, placed on the middle and two ends of pediments to support statues. The word is also used by some authors for the statues themselves in such situations, and sometimes for pinnacles or balusters.

ACTÆON. *In archaiology*. A great hunter, the son of Aristæus and Autonoë, whose metamorphosis into a stag is related in the Metamorphoses of Ovid. Ancient sculptures representing this fable are rarely met with; but modern painters have often attempted it in their compositions. Many of these differ from the ancient manner of relating this metamorphosis; for the artists of those times give him a human form with the horns of a stag just branching from his head, because, if they had (like the poets) rendered the metamorphosis complete, it

would leave dwindled to a common stag-hunt. Titian has conformed to this just idea, in his picture of Actæon, which was in the celebrated Orleans gallery.

ACTION. [*actio*, Lat. *action*, Fr.] *In painting.* The series of events represented in a fable. (See SUBJECT.) *Action*, in painting and sculpture, is that which gives reality to description; it is the embodying of that moment of time which the author chooses to represent. Action is sometimes confounded with motion (see MOTION), in saying a "*figure has action*," meaning "*motion*." In the arts as well as in literature, an action should be true, connected, natural, and simple. Any thing that disturbs the unity of the *action* always weakens the interest.

ACUTIATORES. *In archaiology.* Artisans who went with the Roman armies to sharpen the arms.

ADAMAS. *In gem sculpture.* See DIAMOND.

ADONIA. [Lat.] *In archaiology.* Festivals kept in honour of Venus, in memory of her beloved Adonis, and often the subject of the works of ancient sculptors.

ADRIAN'S VILLA. See VILLA.

ADVENTITIOUS. See EXTRANEOUS.

ADYTUM, or Sanctuary. [ἄδυτον, Gr. *adytum*, Lat.] *In architecture.* A secret place or retirement in the ancient temples, from whence the oracles were given, and into which none but the priests could enter. They were sometimes in the rear of and sometimes under the temple. The only well preserved adytum is that of the little temple at Pompeii. (See POMPEII.) The statue of Diana of Portici was found in its interior, elevated a few steps at the back of the temple, and was kept in perfect darkness. In Jewish architecture the sanctum sanctorum was a similar part of their temple.

ADZE. A kind of crooked axe used by carpenters.

ÆDES, Lat. *In architecture.* An inferior kind of temple, consecrated (according to Varro) to some deity, but not formally, by the augurs; which if they afterwards received, they changed their names to temples. They were often of the same form as the temples, but less sumptuous in their decorations.

ÆDICULA, Lat. *In architecture.* A small house or chapel; but is understood in different significations in Roman authors. In some it is used as a diminutive, and signifies in ancient architecture no more than a smaller *ædes*, and in civil architecture, a small house. Sometimes it denotes the inner part of the temple, tabernacle, alcove, or niche, where the altar and statue of the god was placed, because its exterior resembled the form of an *ædes* or little temple. Representations of *ædiculæ* are often found on medals, and in many sculptures are found the figure of the prince or founder of a temple or church, holding in his hand an ædicula or model of the building which he had erected. The Romans erected one which they called *ædicula ridicula* to the god of mirth, in commemoration of the repulse of Hannibal by severe weather, when he was advancing upon Rome after the battle of Cannæ. See also *Reliquary*.

ÆDITUUS. [Lat.] *In archaiology.* An officer belonging to temples, who had the charge of the offerings, treasure, and sacred utensils. The female deities had officers of this kind, called æditutæ.

ÆGICRANES. [from the Greek.] Heads or sculls of rams, with which altars, friezes, and other sculptural monuments are covered. See BUCRANES.

ÆGINA. *In architecture.* An island in the Saronic Gulf of the Ægean Sea, where are the remains of a magnificent temple on the summit of Mount Panhellenius, the sculptures of which were discovered and described by Mr. C. R. Cockerell in the Journal of Science.

ÆGIS. [αἰγίς, Gr. from αἴξ: *Ægis*, Lat.] The shield or breastplate of Jupiter and Pallas, supposed to have been made originally of the skins of a goat, and afterwards by Vulcan, of brass, rendered terrible by a gorgon's head being sculptured upon it. Lactantius says that it was made of the skin of the she goat which nursed Jupiter, and that he first used it against the Titans. *Ægis* is also used for the pieces of goat skin with which the ancient warriors covered their breasts and shoulders, as a guard against the weapons of their enemies. Variety of ancient monuments attest the antiquity of this practice. Homer gives to the *ægis* of Jupiter the power of being both defensive and offensive, as all his deities, with whatever circumstances they are endued in common with mortals, are made to possess some peculiar and supernatural power. The blood which issued from their wounds is *ichor;* their drink is *nectar;* and their food is *ambrosia.* This poet always personifies the effects which the arms of his gods and heroes, and the charms of his goddesses possess over mortal men; placing in the girdle of Venus the most attractive charms, as love, tender desires, and those sweet but omnipotent sensations which influence in secret the hearts of the wisest. He, who on the buckler of Agamemnon has placed fear

and terror, naturally enough added to the Ægis of Jupiter force, terror, discord, and alarms; and to add more honour to the arms of this most powerful of the gods, he places in the middle the head of the horrible Gorgon with its intertwined serpents. These are the arms which gave to Jupiter the name of *Ægiochus*, the shaker of the Ægis, because by this motion alone, on its exhibition, he made his enemies tremble.

The Ægis of Minerva with which she descended into the camp of the Greeks, to excite them to battle, and to dissuade them from the disgraceful intentions they had conceived of abandoning Troy and returning home, is also described by Homer. She bears an Ægis which he describes as precious, indestructible, and eternal, fringed with a border composed of a hundred tufts of gold, each valued at a hundred oxen.

The ferocious custom of cutting off the heads of their enemies, or scalping them, as practised by barbarous nations, and which is undoubtedly the origin of the Ægis, is sometimes found even among the Greeks; as in the Iliad we find Diomed cutting off the head of Dolon. Among the ancient nations the head, or scalp of an enemy, was carried as a mark of triumph on their shields; and in later times they imitated it in metal for the centre and ornament of their bucklers. On one of the vases in the collection of the late Sir W. Hamilton, now in the British Museum, is represented a large buckler, bearing in the middle a human head, which has nothing in common with the Gorgon. In more modern times a head was also placed on the breast of the cuirass. Homer, in describing the Ægis, does not mention it being covered with scales, but only a skin, in the middle of which is a Gorgon's head encircled with snakes. The scales appear to be a posterior addition, and give an idea of greater resistance. Virgil has not omitted the scales in describing the Ægis, which the Cyclops forged in the depths of Ætna.

This armour was not peculiar to Jupiter and Minerva, although generally appropriated to them by the poets. Apollo, in the fifteenth book of the Iliad, marches at the head of the Greeks, conducting to combat the people who followed the mighty, terrific, shagged, dazzling Ægis, which Vulcan the artist had given to Jove to be carried for the terror of men. When Achilles dragged the body of Hector round the walls of Troy, the pity of Apollo was excited, and he covered him with a golden Ægis. In the temple of Jupiter Olympus there was a statue of Victory which had a golden buckler, on which was the Ægis and Gorgon, probably because Victory proceeded from Jupiter; and Rome, for a similar reason, namely being under the special protection of Jupiter and Minerva, was personified on a beautiful medallion as a female warrior armed with the Ægis.

The Ægis, at length, descended from deities to heroes, warriors, and emperors. On a fine cameo, in the royal library at Paris, an engraving and dissertation upon which is published by MILLIN, Ulysses is covered with the Ægis, as a symbol of the protection of Minerva. This allegory of the protection which the gods offered to men became a species of amulet; and above all, the Gorgon, or Medusa's head, was conceived by the ancients to have the virtue of averting witchcraft or enchantments; for which reason the Roman emperors, without bearing what is more properly the Ægis, have a Gorgon's head sculptured in the middle of their breast on the *lorica* or brigantine. The only instance generally known of the Ægis being fixed on the arm is on an intaglio in the cabinet of the Emperor of Russia, representing Jupiter Axur, or the Beardless. Jupiter is generally represented with the Ægis on the left shoulder, as in the beautiful cameo of the royal cabinet at Paris, which represents Jupiter Ægiochus. The Ægis on the knees, as in the figure of Tiberius, on the grand cameo of the same cabinet, indicates peace and repose to the world. See ALLEGORY, MINERVA, &c.

ÆLURUS. [ἄιλουρος, Gr. a cat.] *In archaiology.* The deity or god of cats; represented sometimes like a cat, and sometimes like a man with a cat's head.

ÆNEAS. *In archaiology.* A well known Trojan prince. The history of this hero, like those of Achilles, Ulysses, and other great men of antiquity, has often been the subject of a great number of compositions in the fine arts, both ancient and modern. The details of his life belong more properly to a work on mythology or archaiology than to the present, and are therefore omitted.

ÆNEATORES. [Lat.] *In sculptural archaiology.* The general name of all the musicians of the Roman army, from the circumstance of all their instruments being made of brass. Their particular names were according to the instruments they permorined on, as *tubicines, cornicines, buccinatores*, &c.

ÆNIGMA. [αἴνιγμα, Gr.] *In archaiology.* An obscure sentence, a riddle. Under this denomination may be classed the

Egyptian hieroglyphics. *Vide* HIEROGLYPHICS.

ÆRARIUM. [Lat.] *In architecture*, and in Roman antiquities, the treasury, or place where the public money was deposited; when it contained that only of the prince, it was called FISCUS; although both are sometimes used synonymously.

ÆRIAL PERSPECTIVE. That branch of the science of perspective which regards the relative subordination of colour in proportion to their distance from the eye. See PERSPECTIVE.

ÆSCULAPIUS. See ATTRIBUTES.

ÆSTHETICKS. [αἰσθητος, Gr. *esthétique*, Fr.] The science of sensations. This name is applied to the *philosophy of the fine arts* (see PHILOSOPHY), or the science of deducing from nature and taste the theoretical rules and elementary principles of all the arts. Aristotle was one of the first who formed general rules drawn from a variety of unconnected observations; but his treatises on rhetoric and poetry are not regarded as complete theories of these two arts. Later critics have augmented the number of rules, but without discovering new principles. Among the moderns, the *Abbé* DU BOS was the first who *(in his Réflexions sur la Poësie et sur la Peinture)* attempted to establish the theory of the ARTS upon general principles, and to demonstrate, according to those principles, the truth and justice of appropriate rules. BAUMGARTEN, professor of philosophy at Frankfort on the Oder, also taught the philosophy of the fine arts upon general principles, and it was this author who first gave this theory the name of ÆSTHETICKS (see TASTE). Yet it is extremely difficult, if not impossible, to establish any clear principles by which certain rules may be deduced; which difficulty may probably proceed from the idea of beauty being connected with sensation, and the rules being dictated by reason, which has, perhaps, no relation or intercourse with sensation.

The principal authors who have treated on the elements of Æstheticks are, a treatise *Sulla Filosofia nelle Belle Arti*, by EUSTACHIO ZANOTTI; *Les Beaux Arts réduit à un seul Principe*, by the *Abbé* BATTEUX; *Cours de Littérature*, by the same author; HOME'S *Essay on Criticism*; some essays in a periodical paper, written by eminent professional men, called the *Artist*, LONDON, 1808; *An Inquiry into the requisite Cultivation and present State of the Arts of Design in* ENGLAND, by PRINCE HOARE, LONDON, 1806; *Théorie des Beaux Arts*, by SULZER; KANT'S *Critique du Jugement*; WATELET'S *Dictionnaire de Peinture*; MILLIN'S *Dictionnaire des Beaux Arts*; HUMBOLT'S *Essaies Æsthétiques*; and many others who have written on the principles and rules of taste in literature and the fine arts.

ÆTERNITAS. *Vide* ETERNITAS.

ÆTIAIOI. [ἀιετιαιοι, Gr. *aquila*, Lat.] *In architecture.* The name given by the ancient Greek architects to certain stones which formed that part of the temple called ÆTOS. (See ÆTOS and FASTIGIUM.) This word is found in the Athenian inscription brought to England by Dr. Chandler, and now deposited in the British Museum, relative to the construction of the temple called the Erectheum; by which it appears that the Ætiaioi are the slabs which form the face of the Ætos or tympanum of the pediment. The facing of this part of the building is done with vertical joints, one course of stone in height. For a copy of this curious inscription see CHANDLER'S *Inscriptiones Athenienses* and WILKINS'S *Atheniensia.*

ÆTOMA. See ÆTOS.

ÆTOS. [ἀιετὸς, Gr. *aquila*, Lat.] *In architecture.* The name by which the Greeks designated the *pediment* or *tympanum* of an edifice. BEGER was the first who discovered the meaning of this word, to which WINCKLEMAN, in his Essay on Architecture, and VISCONTI, in the MUSEO PIO CLEMENTINO, have appended some valuable observations. It appears that the custom of ornamenting the apex of the roofs, or ridge, with figures of eagles, called in Greek ἀιετος, was derived from the Corinthians; and that the name ÆTOS, ÆTOMA, given at first to the ridge, and afterwards to the pediment or tympanum, was derived from this custom. Some authors have imagined that the Corinthians borrowed this idea from the sacred hawk with extended wings, which they had seen in the temples of the Egyptians; but they owe less of the application of the pediment to the Egyptians than they do of their capitals. Winckleman supposes, with great probability, that the ancients originally placed a representation of the bird of Jove in this situation, as being the summit, and therefore in the earliest periods was dedicated to Jupiter. Several ancient medals have been seen with this bird on the roof, particularly the coins of Tarsus and Pergamos. Besides these authorities, in favour of the opinion that this custom gave this specific name to the pediment, may be added the authority of Shaw, who discovered the figure of an eagle on the pediment of a temple near Tunis, built in the time of the

Antonines. Various basso rilievos, which decorated the Ætos of several temples, are described and delineated in the eighty-eighth plate of the fourth volume of the *Musio Pio Clementino.*

Sometimes the ancients placed an isolated figure on the apex of the pediment, and others on the lower extremities, as in more modern erections; but they always made some part of an action; as, for instance, Jupiter, placed in the centre of the pediment, destroying Titans with his thunder; who recumbently occupied the lower part where there was more room for such figures; and propriety here is evident. An erect figure is best on the summit; and recumbent, reclining or double figures, are also best for the lower extremities. Sir Christopher Wren, with great propriety, has observed this rule in the principal front of St. Paul's Cathedral. The centre figure, St. Paul, being erect on the summit of the pediment, and the lower ones (St. Luke and St. Mark), with their attributes, the ox and the lion, occupying, in recumbent postures, the base. Instances to the contrary may be seen on the pediments of Queen's College, Oxford, and the mansion of Lord Spencer, in the Green Park, London, where all the figures are single and erect, presenting rather the appearance of pinnacles than of sculpture, though the latter figures, by Spong, are among the finest out-door sculptures in England. See Eagle, Pediment, Apex, Tympanum, and Fastigium.

Affectation. [*affectatio*, Lat.] The art of making an artificial or deceitful appearance. This fault in art, a species of which is sometimes called by the French *contourné*, and relates to outline only, is equally to be avoided by the painter, the sculptor, and the architect. Affectation is the certain result of an abandonment of the simplicity of nature, in colouring, in drawing, or in action; or where either is overcharged and false; or where artificial colouring, drapery, outline, or appearance is given to any one of the branches of the plastic arts, instead of a more natural arrangement.

After. [*après, d'après*, Fr.] *In painting and sculpture.* In imitation of. In art a person is said to draw, to paint, to model, to sketch, to colour after nature; after Raffaelle, after Titian, &c. The Italians call it *appresso*, near, close to; and it signifies, as well as our word, following, or in imitation of; and teaches, that to reach the perfection of nature, of Raffaelle, of Titian, &c., it is necessary to have them perpetually in the mind, and to be continually studying the proposed original.

Agalma or Agalmata. [ἄγαλμα, Gr.] *In sculptural archaiology.* Originally these words were applied to any ornament upon a statue, or within the temple; but afterwards to the statue, and sometimes to the temple itself, as well as to representations of them on statues and seals. See Statue.

Agalmatopoios. [ἄγαλματα and ἐποίει, Gr.] *In sculptural archaiology.* A maker of ornaments and figures. A sculptor. See Sculptor.

Agate. [ἀχάτης, Gr. *achates*, Lat.] *In gem sculpture.* A compound mineral or precious stone of the lowest class, used by gem sculptors. It is of two sorts, the oriental and the occidental. The former is almost transparent, and of a vitreous appearance; the latter is of various colours and often veined with quartz and jasper. The ancients made much use of it in their gem sculpture, and named it from the river Achates, in Sicily, where agates were much found. Their varieties were distinguished by the following names from their colours, *leucachates*, *cerachates*, *hæmachates*, as they were principally tinged with *white*, *wax*, or *blood* colours. We also find they use the term *dendrachates*, or *herborised* agates, which were perhaps the modern mocha stone. Pliny relates, that Pyrrhus had a figured agate, which naturally resembled Apollo and the Muses: and it is also related that the golden palace of Nero was embellished with numbers of them. Agates of various species are often met with in shops in London, with pretended natural portraits, figures, &c., but it is now a well known fact, that they are done by art. The different varieties of the agate have been and are still much used in ornamental architecture, for tabernacles, cabinets, boudoirs, musaick work, &c., generally, in Italy, but particularly at Florence. In the cupola of St. Laurentius, in that city, which is sometimes called the Mausoleum de Medicis, are many very fine agates among the musaicks. (*Vide* Mosaick, or Musaick.) The onyx, sardonyx, and cornelian are much used by the gem sculptors of the present day, and are highly valued when they possess two or more stratæ, which they remove partially, and form two or more colours, and are called cameos. (*Vide* Cameo, Onyx, Sardonyx, Cornelian, Gem, Sculpture, &c.

Ages. [*âges*, Fr.] *In archaiology.* Certain periods of time attributed to some particular man, or race of men; or to some particular circumstance which cha-

racterizes its whole duration. In the history of the FINE ARTS, some celebrated men, patrons of art and literature, have had the ages in which they lived designated by their names. Thus we say, *the age of Pericles; the age of Ptolemy; the Augustan age; the age of Leo X.; the age of Louis XIV.*, called the *Augustan* age of France, &c.

AGONALIA. [from ἄγονος, Gr.] *In archaiology.* A festival instituted by Numa Pompilius in honour of Janus, and attended with the agones, or solemn exercises, from whence, in Ovid's opinion, it took its name. *Vide* Ovid. Fast. lib. 1.

AGONOTHETA, or AGONOTHETES. *In archaiology.* The president, or superintendant of the agones, or sacred games of the Greeks.

AGORA. See MARKET, FORUM, &c.

AGREEABLE. [*agréable*, Fr.] *In painting.* Pleasing, graceful. There are subjects in art which by their nature are susceptible of presenting objects, actions, sites, &c. which we love to see and to recall to our remembrance; these furnish subjects for an agreeable style. The principal objects to be consulted in forming a composition of this nature are, to avoid affectation, to give a character at once pleasing and instructive, and to avoid what is called *Manner* (*vide* MANNER), which is often occasioned by a strong attachment to prejudices, by the feelings of the moment, and by the caprices of luxury and refinement. In general, when a nation has arrived at a high degree of excellence in the FINE ARTS, the agreeable style supersedes the grand, and is the first step downwards to a state of decline. Thus it was when the agreeable or pleasing style of Praxiteles, and the artists who flourished under Alexander, succeeded the grand and elevated style of Phidias and the artists of the age of Pericles, and was the forerunner of the decline and extinction of the arts in Greece.

AGREEMENT. [*agrément*, Fr.] Concord, union. In every composition, or design, in painting, sculpture, or architecture, it is necessary to obtain excellence, that every part or portion of its arrangement should bear a certain degree of resemblance throughout, in style, character, and truth, which is called agreement, or harmony, resembling concord, or agreement of parts in music. See HARMONY.

AIR. [ἀήρ, Gr. *aer*, Lat.] *In painting.* The element which encompasses the terraqueous globe; the medium through which each object is viewed in nature, and supposed to be viewed in every picture. The density or transparency of the air produces different effects upon the appearance of objects, a true knowledge of which is indispensable to the artist. It alters the appearance both of the dimensions and colours of objects, according to the relative distance from the eye of the spectator; it softens the local colours, the lights and shadows, and renders them more or less decided, or characterized, producing what is technically called *tone.* (See TONE.) The interposition of the air occasions that azure mistiness of distance, which is deeper in tone, as it recedes from the horizon, where it is often lost in a gray obscurity and indistinctness of object. These appearances again differ in different seasons of the year, and different times of the day; and it strongly behoves the artist, particularly such as would excel in landscape painting, attentively to study and fix in his mind these different phenomena, which so well determine the period of time in the works of the best masters. (See ÆRIAL PERSPECTIVE.) After a due study of nature and the great masters, some excellent observations may be obtained from "*Le Grand Livre des Peintres,*" by LAIRESSE; "*Considérations sur la Peinture,*" by HAGEDORN; "*Le Dictionnaire de* WATELET;" "*La Théorie des Beaux Arts* of SULZER;" under the article AIR, &c.

AIR is also applied in painting and sculpture with the same meaning as in dancing or carriage of the body, and implies gesture or graceful action.

AIRY. [from air.] *In painting.* Gay, lively, resembling the effects of air. Applied to a picture, when the light and aerial tints appear true to nature, and harmonized in colour and effect throughout the piece. See LIGHT.

AISLE. [*ala*, Lat.] *In architecture.* The side walks of a church, generally separated from the nave or centre by columns or pillars. Also used by some writers for the wings of a building.

ALABASTER. [ἀλάβαστρος, Gr. *alabaster*, Lat.] *In sculpture.* The common name among ancient and modern artists for gypsum, and the calcsinter of modern mineralogy. Alabasters have a greater or lesser degree of transparency, according to their goodness; have a granular texture, are softer than marble, do not take so fine a polish, and are usually of a pure white colour. The countries in Europe which abound most in alabaster are Germany towards Coblentz; the province of Maconnois in the neighbourhood of Cluni in France; Italy towards Rome, where that of Mon-

taiout is particularly celebrated, not only for its whiteness, but for the size of its blocks, which are large enough for a statue the size of life. There are also many quarries of the granular gypsum, which is used for the manufacture of plaster of Paris, an article so useful in the arts of sculpture and architecture, in Nottinghamshire and Derbyshire. To prepare which, the gypsum is burned in order to deprive it of the water which it contains, and by grinding it becomes a white powder. In this state, which is plaster of Paris, it has a strong affinity to water, so that when they are mixed, they very soon unite, and form a substance which remsembles gypsum in composition, though not in texture. From this valuable material moulds and casts from statues and other sculptures, capitals of columns, friezes, cornices, and other members of architecture are formed, and a very strong cement for the use of the sculptor and mason to form the close joints of marble. It also enters into many other cements used in constructive and ornamental architecture, particularly the mouldings and foliage of the plasterers' art.

The ancients obtained large blocks of alabaster from the quarries of Thebes, where was a town from which it obtained this name, and formed them into statues and columns. There are two figures of Isis of this material, still in Rome; one in the Roman college, and the other in the villa Albani, where there is also a fine column of the same material. The Romans imported a transparent species of foliated hydrous gypsum, or selenite, from the island of Cyprus, Spain, and even Africa, for the purpose of lighting their greenhouses, and formed vases and other ornamental articles from the semidiaphonous sorts, many of which are still preserved in different museums. They are believed also to have lighted their temples by means of lamps placed in vases of the same material. The ancient sculptors sometimes formed statues, the bodies of which were of alabaster, and the heads of some other substance. In the Villa Albani at Rome are several antique busts, and in the British Museum is one of which the body is of alabaster and the head of bronze: there is also a Minerva of the same description in the *Musée des Arts* at Paris. Alabaster was also much used for cinerary and funeral urns, and for holding perfumes. See ALABASTRUM, ALABASTRITES, ONYCHITES.

ALABASTRITES. [ἀλαβαστριτες, Gr. or ALABASTRUM, from the Lat. ἀλαβαστρον, Gr.] *In archaiology.* A box, vase, or other vessel to hold perfumes, formed of alabaster. Theophrastus, Pliny, and Martial mention these vessels under the same name; the former calling them ἀλαβαστρον, and the two latter *alabastrum;* Horace, however, calls them *onychites,* perhaps, because those which he alluded to were formed of onyx. The alabastrum is always among the attributes of the bathing Venus. The statue of that goddess, formerly in the Museum of Arts in Paris, which is inscribed with the name of Bupalus, has near to her an alabastrite of elegant design and workmanship. In the Anthologia, this name is applied to a vase of any material that is without handles. The most valuable and beautiful species of alabaster were sought after for these purposes, particularly the oriental and the sort called *onychites* by Pliny. See ONYCHITES.

ALBANI. See VILLA.

ALBARIUM OPUS. [Lat.] Sometimes called ALBUM OPUS. *In ancient architecture.* According to Pliny and Vitruvius, the incrustation or white covering of the roofs of ancient houses, which was formed with white plaster, or a sort of stucco made of a pure sort of lime, burned wholly from marble. It differs from tectorium, which was a sort of coarser plaster. According to Vitruvius, the baths of Agrippa were covered with the albarium, which he says was also used for the ornaments thereof, and would take the polish of marble. The white chunam of Indian architecture and the white patent stucco of Mr. Chambers the banker are of this description.

ALCAZAR. See ALHAMBRA.

ALCINOUS. *In sculpture.* A king of the island of Corcyra, celebrated by Homer and Virgil for his fruitful gardens, and commended by Orpheus for his rigid administration of justice. He has often been the subject of the sculptor's chisel and of the pencil. See SCULPTURE, STATUE.

ALCORANS. *In Persian architecture.* The high towers used by the Persians in their buildings are called Alcorans. They are surrounded on the outside by two or three balconies or galleries, one above the other, from which certain priests, called Moraiti, repeat fixed prayers from the Koran, several times in the day, walking all round so as to be heard on every side. Like the Turkish minarets they are the principal ornaments of their mosques.

ALCOVE. [*alcova* or *alcoba,* Span.] *In architecture.* The recess or part of a chamber which is generally appropriated in magnificent houses to the state bed. The

word was derived by the Spanish architects from the Arabic word El-kauf, which bears the same meaning. The ancient architects often made their alcoves in the form of a niche, as in the ruins of Hadrian's villa, those of Trajan's villa, at Pompeii, at Tivoli, &c. The alcove of modern times is susceptible of great magnificence and elegance. It may be raised above the other part of the chamber and approached by steps, separated by columns, antæ and balusters, agreeing with the architecture of the apartments, and with dwarf doors in the balustrade for entrance. The interior may be embellished with bassi-rilievi, panelling, pictures, and tapestry, with a magnificent state bed, or throne, to complete the arrangement. If for a bedchamber, at the sides of the alcove should be warm and cold baths, dressing and water closets, &c., according to the magnificence of the mansion, and the rank and opulence of the owner; such as are found in the palaces of Italy and the mansions of the nobility in France and Spain. The alcove should correspond in every respect with the style of architecture and of decoration that is used in the apartment to which it is an appendage.

ALDOBRANDINI. See PALACE.

ALDER. *In architecture.* A genus of plants of the class monæcia, order tetrandia; the wood of which has the quality of long endurance under water.

ALEATORIUM. [Lat.] *In Roman architecture.* An apartment appropriated by the Romans for playing with aleæ or dice.

ALHAMBRA or ALHAMRA, the red city. *In architecture.* The Al-cazar, or royal palace of the kings of Grenada. This splendid edifice, which will also be noticed under the head *Architecture Saracenic,* is supposed by some of the Arabian historians to have been so named from the colour of its materials, was situated in the most pleasant portion or suburb of the ancient city of Grenada, when it was one of the principal seats of the empire of the Moors in Spain. It was anciently a vast fortress, built on the northern brow of a lofty eminence, which commanded a full view of the city of Grenada on one side, and of a charming country on the other; surrounded on all sides by the waters of the Xenil and the Darro, and defended by a double circumvallation of strong fortifications. Its commanding situation, its fine prospects, and its natural beauties led Almumenim the Moorish King of Grenada to select it for his royal residence. Alkatib or Ibnu-l Khatib, in his description of Granada, preserved in Casius *Bibliotheca Arabico-Escurialensis,* thus speaks of its ancient and complete appearance:—"Here are seen lofty towers, very strongly fortified citadels, superb palaces, and other splendid edifices; the view of which fills the spectator's mind with admiration. There a vast mass of water, whose loud murmuring noise is heard at a distance, flows from various springs, and irrigates both the fields and meadows. The outer walls of the city of Granada are surrounded by most choice and spacious gardens; where the trees are so thickly set as to resemble hedges, yet not so as to obstruct the view of the beautiful towers of the Alhamrā, which sparkle like stars among the leaves. No spot, in short, is without its orchards, vineyards, and gardens; and so abundant is the produce of fruits and vegetables, reared on the widely extended plain, that the wealth alone of the first princes can equal their annual value."

The Arabian and Spanish portions of the buildings of the Alhambra form distinct and obvious styles. (See ARCHITECTURE.) The palace is approached from the city of Granada through a narrow street, the Calle de los Gomelles, so called after an ancient Moorish family, which leads to a massive gate, built by the Emperor Charles V., opening into the outer enclosure of the palace. This is entered by a large tower called the Gate of Judgment or of the Law, and is inscribed in Arabic, announcing that it was in this place that the king delivered judgment and distributed justice to the people, assigning the date of its erection (A. D. 1348), and praying for long life to the builder of this "lasting monument of glory."

The Arabian portion of the palace was begun by Muhammed Abū Abdellāh Ben Nasr, the second of the Moorish Kings of Grenada, after the height was fortified as mentioned in the commencement of this article. It was continued by his son and successors, and the whole of its numerous and noble structures were completed under Abu-l Hajjaj, who is represented by the Arabian historians as an accomplished poet and scholar, in the year of the Hegira 749, or A. D. 1348. Many of these edifices fell into decay, and their ruins were removed for the commencement of the Spanish portion of the palace by Charles V. The whole design was worthy of that monarch and of the site, but only one suite of apartments was ever finished; of these, which are fast hastening to decay and ruin, little is worth notice compared with the sur-

rounding buildings and scenery; while the whole of the Arabian edifices are in a state of surprising preservation, when we consider who have been its masters, and the singular vicissitudes of its fate.

The first court which is entered from the Gate of Judgment is a parallelogram, surrounded by an arcade paved with marble, and embellished with musaic and stucco encrustations. In the middle of this court was a deep marble basin in the centre, surrounded, in Swinburne's time, with beds of flowers and rows of orange trees. This court is called in Arabian *Mesuac*, and in Spanish *Del Mesuca*, or the Communa, and was the common baths of the persons attached to the service of the palace. The walls are covered with festoons in high relief, painted arabesques, and sculpture gilt and coloured; the whole of the tablets are filled with passages from the Koran. The ceilings and walls of all the courts are covered with fret-work and that description of ornament from which the human figure is religiously excluded, called after the Arabs *Arabesque;* together with series of minute and intricate combinations of geometrical figures, of which no verbal description can give an adequate account; but of which Mr. Murphy's splendid work on *the Arabian Antiquities of Spain*, contains many beautiful engravings, and to which we refer the inquiring student.

The court of the Lions, so called from the great marble fountain in its centre, composed of twelve ill shaped lions, bearing on their backs an enormous basin, is a parallelogram one hundred feet in length by fifty in breadth, surrounded by a colonnade of white marble, and paved with coloured tiles. The pillars, arranged in pairs and sometimes in threes, are slender in proportion, and fantastic in shape and style, but surprising for their lightness. The walls and the ceiling of the colonnade are covered to an amazing extent with gold, stucco, and the most brilliant colours. The large basin of the fountain of lions contains a second smaller one, elevated on a pedestal, from which rises a column of water, which falling down into both basins, passes through the mouths of the lions into a reservoir below, which communicated with pipes to every part of the palace.

Among the various ornaments which literally cover the walls and ceilings are inscribed various passages from the Koran, which every good Mussulman repeats incessantly; such as, God is great; God is the sole conqueror; there is no God, but God, &c.

Swinburne, in his *Travels through Spain*, has given several interesting views of the Alhambra; as has also Alexander Laborde in his *Voyage Pittoresque en Espagne*. But the best work for the artist to consult is Murphy's *Arabian Antiquities of Spain*, fol. to which may be added for farther reference *A Collection of the Historical Notices and Poems in the Alhambra of Grenada*, which appears as a supplement to the *History of the Mahometan Empire in Spain*, 4to. 1816. The Encyclopædia Metropolitana has also a very interesting account of it under the head *Alhambra*, in its Lexicographical division. The Spanish government some years since had drawings made of this extraordinary edifice, but the artists and the architects whom they employed, mixed in a clumsy manner the ancient and modern buildings, and took more pains to represent the comparatively insignificant buildings erected near the ancient palace by Charles V. and Phillip II. than the more ancient and more splendid works of the Arabians.

Allegory. [ἀλληγορία, Gr. *allegoria*, Lat.] *In painting and sculpture.* A figurative representation, in which something else is intended than is contained in the representation. Milizia ingeniously describes an allegory as a crystal which covers but does not conceal the object which it covers. Images chosen by an artist for an allegory should not be too arbitrary in character or too obscure, but should be a universal language apparent in itself and intelligible to all; for oftentimes when artists would compose general allegories or allegorical figures, they have fallen into intelligibilities, and mere puns or plays upon words. Of such a class is the well known picture of Agostino Caracci, which represents the god *Pan conquered by love*, by which the painter would insinuate allegorically that love is the vanquisher of *all;* and, instead of being a perfect allegory, is a mere pun or play on the double acception of the Greek word Πὰν, the name of the silvan deity and *all.* The resemblance of an allegory to its real and intrinsic meaning may also be too obvious; but equal care should be taken that it be not too obscure.

Under the head of Allegory, rather than that of hieroglyphics, may be classed the two representations of a lizard, which is called in Greek Σαῦρος, and a frog, called Βάτραχος, which were sculptured upon an antique Ionic capital, to perpetuate the name of two architects, *Saurus* and *Batrachus.* A man of genius knows how to give a natural signification to his figures, as Poussin has hidden the head of his allegorical figure of the Nile, to indicate that

its source is unknown; and thus also on the base of the statue of Nilus little genii are represented throwing a veil over his urn; and at the same time, being about him, express its fecundity, as does the one measuring his foot denote its grandeur of size.

Allegorical images composed of human figures may be carried to a high degree of perfection, by means of *character*, *attitude*, and *action*. In this manner allegories, in themselves apparently trifling or insignificant, such as representations of cities and countries, may be rendered completely intelligible, as in the instances of the cities of Asia, rebuilt by Tiberius after an earthquake; and a beautiful allegorical composition of Angelica Kauffman's of Mars restoring peace to two provinces, by uniting the hands of two interesting females; but this rather should be classed under personification. See PERSONIFICATION.

Allegories may be divided into *physical*, *moral*, and *historical*. *Physical allegories* are those where the artist represents some natural objects, such as a season, night, day, the hours of the day, &c. *Moral allegories* are truisms or general observations taken from the moral world, such as on the antique gem, which represents Cupid as seated on a lion, and also another where he is taking away the sword and shield of Mars, &c.; indicating that love softens the most ferocious spirits. Another similar instance is where Cupid is sculptured as supplicating Apollo to lend him his lyre, intimating the power of genius or cultivated talents, to inspire or give birth to love. *Historical allegories* are those where an event is celebrated, as on most of the medals of ancient and modern times. This last species of the allegory is the most difficult; for it should not be a narrative or a confused series of events, but should represent a single (and that the most important) fact of a well known circumstance, shown in a single point of view.

The perfection of allegory depends in a great measure on the degree towards perfection, to which the component images attain, and their signification is determined by their action.

The uses of allegory are much varied. In architecture, allegory may be used to impress upon the work its destinative character, as the two temples dedicated by Marcellus to Virtue and Honour, which were conjoined in such manner that you could not enter one without passing through the other. Some gem sculptors have even carried allegory so far as to govern them in the choice of the material on which they would employ their skill. Such as these would engrave bacchanalian subjects or divinities on amethysts; infernals, deities on the obsidian gem or other black stone; aquatic deities on emeralds, aqua marinas, and other greenish stones. The ancients used allegories even in their furniture, and thereby gave them much additional interest. (See Mr. THOMAS HOPE'S *Book on Household Furniture.)* Allegory however should be used with much circumspection, and only when a better method cannot be found of expressing the subject. Few modern artists have used this difficult branch of art with more success and grandeur than Rubens, in his Luxembourg gallery and in many separate pictures; and Albano, in various compositions.

Allegory is better suited for medals and medallions than for the other branches of art, but not always then in an equally happy manner. It is sometimes used in painting, as descriptive of *persons, places, and times:* and has been often mingled with historical personages. Du Bos has justly exclaimed against such absurd practices, which is perhaps no where more absurdly used than in the ceiling of the great hall at Greenwich, painted by Sir James Thornhill. There we see a British monarch and his attendants mixing with allegorical figures of commerce, rivers, deities, trades, genuine miners, and coalmen.

Annibale Caracci, in one of his pictures for the Farnese gallery, for fear of the subject being mistaken, has written in it *Genus unde latinum*, to indicate that it means the allegory of Venus and Anchises.

The simplest allegories are in general the best, such as wings being added to some divinities, to denote swiftness; the hand placed upon the head to signify *repose*, the finger on the mouth, *silence;* the the legs crossed, or a torch reversed, *sleep* or *death;* the caduceus of Mercury; the quiver and bow of Cupid, &c. which were invented when arts and literature were at a high pitch of excellence, but rather may be considered as emblems. (See EMBLEM.) The abuse of allegory and its consequent obscurity may be dated from the time of the decadence of the arts and literature.

A knowledge of the allegorical system of the ancients is indispensably necessary towards a right understanding of their monuments of art, and to direct us in the art of composition. A collection of the best allegories reduced to a system, under the different species into which they might with propriety be divided, with their various subdivisions, would be a work of primary utility to artists and men of letters. The best

works extant on the subject are the admirable treatises on allegory, by WINCKLEMAN; the article ALLEGORY in the Dictionary of WATELET; the *Dictionnaire des Beaux Arts, de* SULZER; and the *Dictionnaire des Beaux Arts, de* MILLIN. The *Polymetis* of the REV. MR. SPENCE, and the explanations of monuments of art given by BUONAROTTI, WINCKLEMAN, VISCONTI, HEYNE, BOETTIGER, LESSING, KLOTZ, and other modern antiquaries.

ALLEY. [*allée*, Fr.] *In architecture.* A place where it is possible to go or pass. Applied particularly to walks leading from the door of a mansion or other building into and through a garden, and to narrow streets, passages, or paths from main streets or roads. See GARDENING, WALKS, &c.

ALTAR. [*altare*, Lat. from *alta ara.*] *In architecture and sculpture.* A place whereon offerings to the deity are placed. Among the ancients, altars differed as much in their form and ornaments as in their application. Among the Jews they were raised to receive offerings to Jehovah; to the gods in the mythology of the heathens; and in many Christian communities it is applied to the place whereon the sacrament of the Lord's Supper is administered. The first altars we read of are those erected by Cain and Abel for their various offerings; and in sacred history we are perpetually reading of them from the simple stone or heap of stones to the embellished altars of incense, of burnt offerings, and of shew-bread, in the temple of Solomon at Jerusalem.

The Greeks had three kinds of altars in their mythological worship: one sort, like those of the Jews, served to burn incense on and to make libations; another for the service of their sanguinary sacrifices; and another to receive their burnt offerings and sacred vases. The latter were called *εμπυροι*, from their application to the use of offerings by fire; those without fire were called *απυροι*, and those where no blood was suffered to approach *αναιμακτοι*. Venus had an altar at Paphos which was *αναιμακτος*, but not *απυρος*; and Tacitus says she was worshiped, "precibus solis et igne puro," by prayers and fire alone.

The forms of altars among the ancients were various: sometimes a perfect cube, which was the most common among the Greeks, at others a parallelopipedon; sometimes round, at others octangular, triangular, &c. according to the material of which they were formed; and from some ancient medals we find there also existed altars of a circular figure. Those which were constructed of metal were generally triangular in their plan, and formed like a tripod; others, constructed of brick or stone, were mostly cubical; and some have sculptured bases and pedestals like candelabræ. (See CANDELABRÆ.) Some, according to Pausanias, were even constructed of wood; but by far the greater number that have been preserved to our times are of marble.

The height of the ancient altars varied as much as their shape; sometimes the height of a man's knee, and at others, as high as the middle of his body. On solemn festivals the ancients decorated the altars of their deities with leaves or branches of the trees that were sacred to them; as those of Minerva with the olive, Venus with myrtle, Apollo with the laurel, Pan with the pine, &c.; and it was from these temporary decorations that the ancient sculptors drew those elegant elements of foliage which embellish the altars of antiquity. On others that were intended for their sanguinary oblations, and were hollowed at the top to receive the blood of their victims and the offered libations, are found heads and skulls of animals, vases, pateræ, and other instruments; vessels of sacrifice, mingled with garlands of flowers, such as were used to bind the victims, bands, and other sacrificial accessories. When inscriptions were added, they alluded to the epoch of their consecration, the name of those who erected them, to whose honour they were dedicated, the motive of erection, &c.; the most elegant were decorated with bassi rilievi of the beforementioned subjects, with the divinity to whom it was dedicated, or with his attributes.

The altars of the ancients in their temples were placed, according to the directions of Vitruvius, towards the east; and, probably, hence arose the custom of placing the Christian altar or sacramental table at the eastern end or side of the early churches. Among the ancients it appears to have been invariably observed that the altar should be placed next to the pedestal of the statue of the god.

Altars were erected either in temples, porticoes, or peristyles, and sometimes in the open air. Sacrifices were even performed upon an altar formed of turf and green earth (the aspes vivus of Horace), and were according to Hesychius termed *Θυσιαι αποβωμιο.* The altars of the Greeks were originally made of heaps of earth, and sometimes of ashes, as that of the Olympian Jupiter, mentioned by Pausanias; there was also another altar of ashes at Thebes, consecrated to Apollo, who derived from

it the cognomen of Σποδιος. In process of time they were formed of brick and stone; such was the material of the famous altar at Delos. They were at first erected in groves, in the highways and streets, as well as upon the tops of mountains; but after the introduction of temples, they were of course transferred to those edifices.

Altars as well as temples were accounted so sacred by the ancient Greeks, that most of them had the privilege of protecting malefactors, debtors, and even rebellious slaves who fled to them for refuge. Plutarch informs us that those who killed Cylon and his followers, when holding by the altars, were afterwards stigmatized with the epithet αλιτηριοι, impious and profane; and Justin, in his history, observes that the murder of Laodamia, who had fled to Diana's altar for protection, by Milo, was the cause of his death, and of the public calamities of Æolia. In the comedy of the Mostellaria by Plautus, the inviolability of altars and temples appear to have existed among the Romans. Every temple however was not a sanctuary, but only those which had received that privilege from the manner of their consecration. The first asylum is generally supposed to have been founded at Athens by the Heraclidæ; but some writers assert that there was one previously erected at Thebes by Cadmus.

Independent of the public altars of the Greeks and Romans, they had also private or domestic altars, which were dedicated to the lares or penates, the household gods of the ancients. They were called by the Greeks εσχαραι, and by the Romans foci. The foci contained a perpetual fire, which was considered as sacred to the lar familiaris or the domestic δαιμων, a genius of the family.

In Christian churches, the altar is generally a square table placed at the eastern end, and sometimes the whole of the platform on which it stands is elevated above the floor, and set apart for the reception of the holy communion, marriage, baptism, &c. The Roman Catholics denominate them altars with more propriety than the Protestants, as they regard the celebration of the sacrament of the Eucharist as a real and proper sacrifice. In many churches the altar is of stone, and formed in the shape of a tomb or sarcophagus; a custom probably derived from the earliest periods of Christianity, when their religious assemblies were, for fear of persecution, obliged to be held in the catacombs, and the tomb of a martyr was chosen for the purpose of an altar. For this reason it was formerly a rule in the Romish church never to erect an altar without enclosing in it the relics of some saint. When the church was in the form of a cross, it was usual to place the high altar in the centre of its intersection. The Romanists have carried the execution and decorations of their altars to a degree of splendour unexampled in other churches, embellishing them with sculptures, tapestry, cloth, and vessels of gold, richly sculptured and decorated tabernacles, splendid pictures, columns, cornices, musaics, &c. of the most splendid designs and costly materials. The Protestant churches affect more simplicity, and in many they are simply a plain table, covered only with a cloth on the day of celebrating the sacrament of the Lord's Supper.

Altimetry. [from *altus*, high, and μετρον, to measure.] *In architecture.* The act of taking or measuring altitudes or heights.

Altitude. [*altitudo*, Lat.] *In architecture.* The perpendicular height of the vertex of any solid body.

Alto Rilievo. [Ital.] *In sculpture.* High relief. See Rilievo; Sculpture.

Amateur. [Fr.] *In all the arts.* A French term much applied in this country to persons who are attached to any of the arts, but who do not practise them: but in France it is granted by academies to such as associate with them with similar qualities. Although we have no such description of members in our Royal Academy of the fine arts, the annual exhibition generally produces a considerable number of amateur artists of much talent, who are honoured by an exclusive catalogue of their names under the appellation or title of "*Honorary Exhibiters*," and are admitted to all the public lectures given in the academy, in the same manner as the members, students, and professional exhibiters.

To be a genuine amateur, it is necessary that the person so called should possess, besides a sufficiency of critical knowledge, some practice, and an allowed good taste, or he will fall under Milizias' censure of "Amatori senza amore, conoscitori senza conizitioni," which is similar to that of the Russian Count Stroganoff in the preface to the Catalogue Raisonné of his fine collection of pictures, "Délivre nous, grand Dieu, de ces connoisseurs sans connoissance et ces amateurs sans amour." The French phrase "Il ne sait pas peindre, mais il est amateur," well expresses the character of the critical amateur.

Amazons. [from *a'* without, μάζὸς, a breast.] *In sculpture and painting.* A nation of warlike women, in Scythia, near

Mæotis. A nation or colony of them is said to have established themselves near the river Thermodon in Cappadocia, and afterwards to have extended their settlements along the Euxine, as far as the Caspian sea. According to some historians, the amazons formed a nation who originally murdered their husbands, and in which they allowed the male sex to have no permanent settlement, being only occasionally admitted for the purpose of continuing their race. Authors do not agree respecting the treatment of the children thus obtained; but all agree that only the female infants were reared by them for the service of the state. These females were carefully educated and were trained up for war by the labours of the field, and by the constant practice of manly exercises. They cut or burned off their right breasts, to enable them to command their bow and arrow with more expertness, and weild their battle axes with more vigour. According to Strabo (book xi. chap. 5. sec. 5), they built the cities of Ephesus, Smyrna, Cuma, Myrrhina, and Paphos; and Diodorus Siculus (book iii. chap. 55.) mentions that they built the cities of Cyme, Pitane, Prynea, and Mitylene.

The arms of this people were the javelin, the bow, the battle axe, and the shield, which was in the form of a half moon. Their costume, according to Quintus Curtius, reached only to the left breast, and just below the knees, covering the defect of the right side. In the Phigaleian marbles the diversity of costume among the Amazons is very apparent and remarkable. In some instances they are represented in long tunics reaching to the ground, in others, with a short vest reaching only to the knees, and in another, an equestrian Amazon has her arms covered with long sleeves, and her legs clothed with a sort of trowsers; all of which dresses, according to the testimony of ancient authors, were in use among the Amazons. In some instances their heads are without any covering, while in others they are defended by a close helmet; their legs, with only one exception, are protected by boots. Quintus Curtius, in his history of Alexander the Great, gives a detailed account of an interview between that prince and an Amazonian queen, named Thalestris, which was avowedly for the patriotic purpose of continuing her race by so gallant a warrior. Thalestris made no secret of her errand, and urged her claim to the honour of giving an heir to the Macedonian throne. She was received and entertained by Alexander for thirteen days, but died shortly after her return home.

There are various representations of the figures and costume of Amazons among the terra cottas in the British Museum; and the chief authors who have described them are Justin (lib. 2), Herodotus, Diodorus Siculus, Strabo, and Quintus Curtius. Plutarch in his life of Theseus says of them, that "they clearly resemble fable and fiction." Strabo the geographer, a native of Cappadocia, strenuously opposes the opinion of their existence; and an able writer in the Encyclopædia Metropolitana, under the head "Amazon," thinks their existence is founded upon circumstances not at all more substantial than the structure of most Grecian fables; although their existence has found advocates in the celebrated names of Petitus and Dr. Johnson; the former of whom published a learned dissertation on this subject at Paris, in 1605; which was attached by our learned countryman, Bryant, in his Mythology, vol. i. page 52; and vol. v. page 110; to which work the inquiring reader is referred for further information upon their fabulous attributes. Gibbon, in his "Decline and Fall of the Roman Empire," asserts his unbelief upon this point with great success.

The actions of the fabulous race of heroines were often the subject of the ancient sculptor's chisel. Besides the terra cottas beforementioned, are the celebrated battles of the Athenians and the Amazons on the friezes of the temples of Theseus at Athens, and of Apollo Epicurius on Mount Cotylion, near the ancient city of Phigaleia in Arcadia. In the latter sculptures, which are now in the British Museum, the Amazons are all with perfect and well shaped breasts, which gives some authority to the derivation of their name by Eustathius (ad Hom. Iliad. i. p. 402. 38 edit. Romæ, 1542). That their name is derived from *α* privative and *μαζα* bread, from the savage mode in which they lived, feeding on the flesh of wild animals. Others again suppose the name to have been derived from *ἅμα ζῆν*, as they lived together without the society of men. But at all events, in this celebrated frieze as well as in all the other ancient works in which the Amazons were represented by the ancients, they are invariably sculptured with both breasts entire, but they have generally, like the huntresses attendant on Diana, one exposed, and the other concealed by drapery. Such representations may be found in these celebrated sculptures, and the beautiful engra-

vings made from them and published by the trustees of the museum, edited by TAYLOR COMBE, Esq. London, 4to. 1820. In a basso rilievo in the same museum representing a group of captive Amazons; in the Museum Capitolinum, vol. iii. pl. 46; in the Museo Pio Clementino, vol. ii. pl. 38; Bronzi di Ercolano, vol. ii. plates 63, 64; Winckleman, Monumenti Inediti, pl. 237.

Among the ancient artists who are reported to have painted those heroines, Pausanias (Attic c. xv. and xvii.) describes the walls of the temple of Theseus to have been painted with the battle of the Athenians under the command of Theseus against them, but does not mention the names of the artists; but Pliny says that the paintings were executed partly by Polignotus and partly by Micon. Arrian and Aristophanes on the contrary relate that the battle between the Athenians and the Amazons was painted by Micon. See ARISTOPH. Lysist. v. 679. ARRIAN de Exped. Alex. lib. vii. c. 13.

In the late collection at Paris was a very fine artique statue in Parian marble of an Amazon; and there is also a very beautiful one of a Queen of this nation, at Wilton, a seat of the Earl of Pembroke, among his lordship's numerous and fine collection of ancient marbles, sculptured by Cleomenes.

AMBER. [*ambar*, Arabic, *amber*, German.] *In gem sculpture.* A sort of resinous, yellowish, semitransparent substance, used by the ancients in gem sculpture, and other ornaments. See ELECTRUM.

AMBO. [*ἄμβων*, Gr.] *In architecture.* An elevated place, rostrum, or pulpitum, used in the early churches, for the purpose of saying or chanting some parts of the service, and from whence religious orations and exhortations were delivered.

AMETHYST. [*ἀμέθυστος*, Gr. *amethystus*, Lat.] *In gem sculpture.* The name of a precious stone of a violet colour, of the family of the quartz, well known to the Greeks, from whom the coloured variety received its name (*α* privative and *μεθυστος* drunk), on account of the power which they imagined it to possess of restraining drunkenness, or preventing intoxication. The white amethysts are both natural and produced by the action of fire upon the coloured varieties, whilst its transparency causes a double refraction, and such a splendid brilliancy that it is sometimes substituted for the diamond; from which it can only be distinguished by its want of adamantine hardness. The purple amethyst was alone received by the ancients as the true sort, and the opinion of its anti inebriating qualities arose from the similarity of its colour to the weaker or diluted wines. Plutarch, however, in his morals, combated the idea. This prejudice, however, prevailed to such a degree that it was usual with great drinkers, among the ancients, to wear one round their necks, or set in a ring as an amulet, that they might drink without fear of intoxication. The larger sorts were formed by the lapidary into cups, that were highly prized for the same supposed quality, which is made the subject of a smart epigram in the Anthology. The ancient artists also took this gem for the figure of Bacchus, to whom the stone was sacred, and for Bacchanalian subjects. See ALLEGORY.

AMICULUM. [Lat.] *In ancient costume.* According to Titus Livius, an upper garment worn by females, distinguished from the *palla* (see this word), as being shorter. According to Cicero and Valerius Maximus, who calls it amiculum acoreum, it was a robe of state; and other writers call by this name the short upper cloak worn by the men, which was also called chlamys and Paludamentum (see these words).

AMPHIPROSTYLE. [of *ἀμφι*, on both sides, *προ*, before, and *στυλος*, a column with columns in front.] *In architecture.* An order of temples that had a portico in front and rear of the cell, like the Ionic temples on the Ilissus, and different from the peripteral, which had the cell surrounded on all sides by columns. See the works of Vitruvius, Palladio, Scamozzi, &c., ELMES's Lectures on Architecture, &c.

AMPHITHEATRE. [*ἀμφιθέατρον*, Gr. *amphitheatrum*, Lat. *amphithéâtre*, Fr.] *In architecture.* A building of a circular or oval form, having its area encompassed by rows of seats one above another, at first called Theatrum Venatorum, or Theatre for Hunting. This word, as its etymon declares, means a building formed of two theatres, each part facing the other; the middle of which was called the arena, from the sand which was spread on its surface to absorb the blood of the combatants. The word is compound from *ἀμφι* about, and *θεάομαι* I behold.

The arena was that part of the amphitheatre in which the different sorts of games, or spectacles, with which the Romans used to amuse the people, such as combats of gladiators and wild beasts, were represented. The nature of these sports or games, obliging the combatants occasionally to pursue and at other times

to fly from their opponents, occasioned them to be built of a circular or oval form. Round the arena were vaults called caveæ, or carceræ, in which were confined the wild beasts appointed for the shows. Immediately above these vaults *(carceres)* was a peristyle, or portico of columns, called the podium, in which the emperor, senators, and other distinguished personages were accommodated. Above, or around this portico, or gallery, were rows of benches as high as the upper part of the walls, from every part of which the arena might be seen. The avenues, &c. by which this part was entered, were called *vomitoriæ*. The lower parts of these public seats were appropriated to the highest classes of the citizens, and those above them, progressively, for the more inferior and lower class of the people. The whole building was uncovered, and its exterior face divided into several stories, ornamented with arcades, columns, and pilasters, and oftentimes with niches and statues. It is calculated they could hold from thirty thousand to eighty thousand people.

Amphitheatres were peculiar to the Romans, being unknown to the Greeks, who never encouraged such barbarous pursuits as were practised in Rome.

Ancient authors have not given us any details of the manner of construction, or of the distribution of these vast edifices. Vitruvius mentions them, but unaccompanied by any details. What we do know on the subject has been collected from actual observation of the state of those that have escaped the ravages of time; the most perfect of which are that of Vespasian called the Colosseum, that of Verona in Italy, and that of Nismes in France. The first who erected an amphitheatre in Rome was Caius Scribonius Curio, in the celebrations which he gave the people on the occasion of his father's funeral obsequies. He determined to surpass all others of his time, if not by magnificence, which his fortune would not allow, at least in novelty. Full of these intentions, he constructed two theatres of wood, back to back, and which, after the theatrical representations were closed, turned with the spectators in them, leaving the stages and scenery behind, and thus forming a perfect amphitheatre, in which he again gratified the people by giving them a show of gladiators. See *Casalius de Urb. Rom. et imp. Splendore, lib.* 36. *cap.* 15.

The principal amphitheatres of Rome, which are now known either through history, or the ruins that remain, are, 1. The *amphitheatrum castrensis*, said to have been built by Tiberius, for the gladiators of the imperial guard. It was of a small size, and situated near the Collis Esquilinus in the fifth region or ward of the city. The ruins are still to be seen to the left of the Holy Cross of Jerusalem. It was of brick, cased with stone, and of the Corinthian order. 2. The amphitheatre of Vespasian, called the Colosseum (see COLOSSEUM), of which says a modern poet, quoting after the historian of the Decline and Fall of the Roman Empire,

"While stands the Colosseum Rome shall stand;"

translating a saying of the Anglo-Saxon pilgrims who visited Rome in the early part of the eighth century, "Quamdiu stabit Colosseus, stabat Roma, quando cadet Colosseus, cadet et Roma; quando cadet Roma, cadet et mundus." 3. That of Statilius Taurus before described; the situation is uncertain, but Kennet places it to the south of the Tiber, nearly opposite to the mausoleum of Adrian, now called the Castle of St. Angelo; and Millin supposes it to have been erected in the lesser Campus Martius. 4. The amphitheatre built by Trajan in the Campus Martius, and destroyed by Adrian. Of these four amphitheatres the Colosseum is the most remarkable, and is one to which the Romans gave the name of *the* Amphitheatre, by way of distinction; it probably was the only one of any magnitude or stability in Rome, being large enough to contain its whole population; the enormous expense of such a building not allowing them to have several.

Pliny gives a description of these movable amphitheatres which has somewhat puzzled the laborious antiquary Count Caylus, but of which M. Weinbrenner, a German architect, has given a very satisfactory explanation, in a memoir which has been translated into French by M. C. Winckler, in the "Magazin Encyclopédique." Amphitheatres in the first ages of the commonwealth were only temporary buildings constructed of wood, which, according to Pliny, sometimes tumbled down with great destruction of lives. The singular invention of Curio was succeeded by the construction of regular amphitheatres, which, as above, being only for temporary purposes, were of wood, and mostly erected in the Campus Martius, or some place out of the city. When Julius Cæsar performed the grand ceremony of the inauguration of his new forum, and the temple of Venus, which he built and dedicated to that goddess, he gave the people, among

other public games, gladiatorial combats, for which he constructed an edifice provided with seats all around the arena; which, however, was but of timber, which was demolished at the close of the games. From these temporary wooden buildings, the form and disposition, as well as the name of amphitheatres were derived.

The fragileness and insecurity of these timber buildings at last induced the Romans to think of making them more secure and permanent. Accordingly they afterwards erected their amphitheatres of stone, and the first that was erected of that durable material was in the reign of Augustus, by Statilius Taurus, in the Campus Martius; the inauguration of which was performed by gladiatorial and other combats. It appears that only part of his amphitheatre was of stone (perhaps only the walls, and the interior fittings of wood), for it was partly destroyed by fire in the reign of Nero. Caligula afterwards proposed erecting a noble amphitheatre of stone, but neither that emperor, nor Claudius, nor Nero, all lovers of gladiatorial sports, ever completed the design. Nero, however, erected, in less than a year, another amphitheatre of wood, in the environs of the Campus Martius. This building was a very stong and solid structure, and built with the largest and strongest timbers. Pliny relates, that it had one beam or girder of larch wood, above one hundred and twenty feet long, and two feet in diameter. Tiberius caused this immense piece of timber to be brought from Rhœtia to Rome, for the purpose of being used in the building of a naumachia; and it was preserved as a curiosity till it was thus employed by Nero.

About this period, they erected amphitheatres also in several provincial cities. Under Tiberius, a freedman named Atilius built a large one of timber, the construction of which was so bad, and the foundation so insecure, that it gave way and fell during the representation of the games, and which cost the lives, according to Tacitus, of fifty thousand persons. Near to Placentia they also had an amphitheatre of wood, which was burned during the siege of that city, in the civil war between Vitellius and Otho.

The principal amphitheatres of which the remains are still in existence are one at Alba, a small city of Latium; another near the Tiber, at Otricolo; another near the Garigliano, anciently the river Lyris, built of brick; another at Pozzuoli, of which part of the arcades and the caveæ for wild beasts still remain; also one at Capua; another at Verona; one at the foot of Mount Cassin, in the vicinity of the Villa of Varro; one at Pæstum; one at Syracuse; one at Agrigentum; one at Cataneo; one at Argos; and another at Corinth. There is a very magnificent one at Pola, in Istria; also one of no less grandeur at Hipella, in Spain.

In France they have one at Arles; one at Frejus; one at Saintes; and one at Autun. But that which has most suffered from time and accident is that of Nismes, called the Arena. (*Vide* ARENA.) At Nice, in the quarter of Cimiez, there is also a Roman amphitheatre, which constantly attracted the curiosity of travellers. The present proprietor has uncovered nealy the whole of this ancient edifice, which in several parts is in high preservation, pulled down the modern encroachments, and enclosed the whole with a wall. He has been rewarded for his pains by the discovery of some fine medals. (*Vide* MONTHLY MAGAZINE for September, 1809.) In almost all the provinces that were under their dominions, the Romans erected amphitheatres, which are lasting monuments of their power and skill in the art of building. See ARCHITECTURE, ARENA, COLOSSEUM, THEATRE.

AMPHORA. [Lat. ἀμφορεύς, Gr.] *In sculpture and ornamental architecture.* A kind of vase, or liquid measure, which had two ears or handles, so named from ἀμφι, both, and φερω, I bear. There are several in the department of antiquities in the British Museum. They were used as a measure for liquids by the Greeks and Romans. The Roman amphora, sometimes called the italic amphora, contained two urnæ or forty-eight sextuaries, equal to about seven gallons one pint English wine measure; and the attic amphora, which was that in use among the Greeks, contained three Roman urnæ or seventy-two sextuaries, or about ten gallons five and a half pints English wine measure.

AMPULLA. [Lat. from ἀμβόλλα, Gr.] *In archaiology.* An oblong vessel bellying out like a jug, chiefly of earth or glass, with a large round belly, used by the ancients to contain oil for anointing their bodies. A vessel of this kind, bearing the same name, is still used in the coronation of the kings of England and France.

AMULET. [*amuletum*, Lat. from *amoliendo*, to remove, or nullify.] *In archaiology.* An appended remedy worn about the neck as a charm, or preservative against mischief, witchcraft, or diseases. Amulets were anciently made of stone, metal, simples, animals, in short, of every thing that caprice

or fancy suggested. Sometimes they consisted of words, characters, figures, &c. engraved on various substances. The British Museum have a great number of them in the eighth room of the department of antiquities, of great variety and curiosity. Pliny describes several sorts as used in his time. See ABRAXAS.

ANADEM. [ἀναδημα, Gr. from ἀναδέω, to bind round, *anadema*, Lat.] *In ancient costume.* A kind of ornament, garland, or fillet, which women wore on their heads. It is also applied to the fillet anciently worn by the Kings of Persia. Our poet Drayton speaks of "*anadems* of flowers," and W. Browne, in his British Pastorals, of "sweet anadems to gird thy brow." See DIADEM.

ANADYOMENE. [from ἀναδυομαι, Gr. to emerge from.] *In the history of painting.* A celebrated picture of Venus, painted by Apelles, which originally adorned the temple of Æsculapius at Cos. It represented the goddess rising out of the sea, and wringing her hair. Augustus transferred it to the temple of Julius Cæsar, and remitted to the inhabitants of Cos a tribute of one hundred talents in return. The lower part of the figure having been injured, no Roman painter could be found to supply it.

ANAGLYPHIC. [ἀναγλυφα, Gr. *ananglypha*, Lat.] *In antique sculpture.* The art of chasing, engraving, or embossing metals, or any work in relief. This kind of art, when in stone, is also called Cameo (see CAMEO). The opposite kind of work, which is done by engraving or indenting, is called Diaglyphic or intaglio. See DIAGLYPHIC.

ANAMORPHOSIS. [from ἄνα, and μορφωσις.] *In drawing.* The art of deformation in design, or perspective projection, so that in one point of view it shall appear deformed, in another an exact representation. Anamorphoses are also projected on a plane, or curved surface; which when the rays are collected in a mirror (sometimes a cylindrical one), they appear regular and in proportion. See OPTICS.

ANANCITES, or ANANCHITIS. [Lat. ἀναγχίτις, Gr.] *In gem sculpture.* A kind of engraved stone, or talisman, also called *synochitis*, celebrated in hydromancy for its magical virtue of raising the shadows (umbræ) of the infernal deities.

ANAPIESMA, or ANAPIESMATA. [Lat.] *In architecture.* The name given by the ancients to those machines by which figures of the infernal deities, ghosts, or shades of the departed were made to arise in their theatres. The anapiesmata were of two sorts, one of which was fixed under the proscenium for the use of the marine gods, such as Neptune in the Troads of Euripides, where this deity consults with Minerva on the punishment of the Greeks after the destruction of Troy; the other was behind the staircase that led from the postscenium into the orchestra, where the furies rose, as in the Thyestes of Seneca, and where Megara drives into hell the shade of Tantalus. In the forty-first plate of the second volume of D'Hancarville's Vases is an engraving in which a fury is thus rising from the earth to torment Orestes.

ANATHEMA. [Lat. ἀνάθεμα, Gr. from ἀνατίθεμαι, set up.] *In archaiology.* An offering or present made to some deity, so called from its being hung up in the temple. This species of dedication was most usual, among the ancients, when a person left off his employment; thus the shepherd would dedicate his pipe to Pan, the fisherman his net to Neptune, the retired soldier his shield to Mars, and the bygone beauty her mirror to Venus. Persons who had escaped shipwreck or other imminent peril seldom failed to testify their gratitude in this manner. See HORACE, &c.

ANATOMY. [*anatomia*, Lat. ἀνατομία, Gr. from ἄνα and τεμνω, I cut.] *In painting and sculpture.* The doctrine of the structure of the animal body, particularly that of man. By this science an artist can alone obtain the knowledge of the bones, or osteology, and of the structure of those external layers of muscles, on which depend, in a great measure, a just *ponderation*, *motion*, and *expression* of his figures.

For this reason anatomy is one of the principal elements of art; and the study of it should not solely be confined to *proper anatomy*, but should also, if the artist would attain eminence, be extended to *comparative anatomy*. The best course of study, for a student in the arts, is to obtain a general knowledge of the principal bones and external muscles, their names and uses, to accustom himself to draw often, both from the skeleton and occasional dissections. To compare his drawings and his observations with the most perfect and beautiful specimens of ancient and modern statues, and the living model. To do the same with those masters whose paintings are most celebrated for anatomical expression and correctness, as Raffaelle, Michael Angiolo, the Caracci, &c. and observe the defects of others. He will finally, by this means, obtain a confidence and correctness of delineating the wonderful human machine. The best books for study would be pointed out by any medical friend; but he must

not omit consulting that admirable work, Bell's Anatomy of Expression in Painting, where the science is treated both as an artist, and as an anatomist.

ANCHOR. [*anchora*, Lat. *αγκυρα*, Gr.] *In ornamental architecture.* A sort of carving something resembling an anchor, intermixed with eggs, and sometimes called a tongue from its resemblance to the barbed tongue of a serpent. It has been used indiscriminately in all the orders, and in almost every circular moulding.

ANCLABRIS. See ALTAR.

ANDRONITIDES or ANDRON. [Lat. *ἀνδρων*, Gr.] *In the domestic architecture of the Greeks.* The apartment devoted to the male branches of the establishment, and was in the lower part of the house. The *gynæcea* or women's apartment was in the upper part. See GYNÆCEA.

ANEMOSCOPE. [from *ἀνέμος*, the wind, *σκόπη*, which may be seen.] *In mechanical architecture.* A machine invented to foretell the changes of the wind. According to Vitruvius's description, it is done by means of an index moving about a perpendicular circular plate or dial, divided like a mariner's compass; the index being turned by a horizontal axis, and the axis by an upright staff, at the top of which is a vane, moved about by the wind.

ANIMATION or ANIMATED. [*animatio*, Lat.] *In painting.* Lively, vigorous. An expression given to a figure in painting or sculpture, when it exhibits a sort of momentary activity in its motions. It is also used figuratively when a painting or statue is executed with that truth and vigour that it appears alive or animated.

ANNULETS. [from *annulus*, Lat. a little ring.] *In architecture.* The small square members in the Doric capital, under the echinus. They are also called armillæ (bracelets), listels, and fillets. The number of annulets vary in several examples of the order. In the Doric capitals of the theatre of Marcellus, in those designed by Palladio, and other Roman examples, there are three; whereas in those of the temple at Pæstum, and in several Greek examples, they consist of four.

ANTA. [Lat.] *In architecture.* A square pilaster, generally narrower on its flank than on its front, placed at the angles of the cell of the temples and behind porticos of columns, differing but little from pilasters. Some architects confine this word to those pilasters which have neither base, capital, nor other moulding; but it is more properly applied when the base and capital differ from the order it is used with, as in most of the Grecian examples, or when it is used by itself, and the base and capital do not exactly conform to an order, as in the example of the Choragic monument of Thrasyllus. Vitruvius calls those angular antæ, which have but too faces out of the wall, to distinguish them from which, placed at the ends of walls or porticos, have three. See STUART's *Antiquities of Athens, the Ionian Antiquities*, &c. also the words PILASTER, PARASTATÆ.

ANTEPAGMENTA. [Lat.] *In ancient architecture.* The jambs of a door; also ornaments carved in wood or stone, and placed on the architrave or round the doors.

ANTES. See ANTÆ.

ANTECHAMBER. [from *ante*, before, and chamber.] *In architecture.* A chamber leading to the chief apartment of a dwelling. According to Vitruvius, in the houses of the Greeks, the *thalamus*, or bed chamber, was separated from the *antithalamus*, or antechamber, by a passage called *prostas*. The use, as well as the form of the antechamber, differs in various countries. In the palaces of Italy, the first antechamber is of considerable dimensions; in France it is smaller; and in England, except in a few large mansions, still smaller. The first antechamber or hall, in the continental architecture of Europe, is for the domestics, and but plainly ornamented; the second is more decorated, and sometimes serves them for an eating or dancing room; and to most of their grand rooms is attached a small antechamber, which is a sort of cabinet or boudoir: these apartments are susceptible of much taste in their ornamenting.

ANTICK. [*antiquus*, Lat.] *In the arts.* Odd, ridiculously wild. In painting and sculpture, it denotes a fantastical composition of men, birds, beasts, foliage, &c. formed out of each other, according to the fancy of the artists. There are several curious specimens of this fancy sculpture among the basso rilievos in terra cotta at the British Museum. See GROTESQUE.

ANTICUM. [Lat.] *In ancient architecture.* A porch to a door southward, to distinguish it from the north, which was called porticum. Also that part of the temple that was between the cell of the temple and the columns of the portico. See FAÇADE, PORTICO.

ANTINOUS DI BELVIDERE. *In sculpture.* A fine statue, formerly in the Museum at Paris, but restored, at the peace, to its situation in the Belvidere Palace at Rome. It is by some called a Mercury. See MERCURY.

ANTIPENDIUM. See ALTAR.

ANTIQUARY. [*antiquarius*, Lat.] *In all the arts.* A man devoted to the study or

pursuit of that which is ancient. The science of an antiquary consists in the study of ancient coins and medals, inscriptions upon buildings, statues, &c. so as to attain, or lead to a knowledge of the customs, laws, and religion of ancient times. See ARCHAIOLOGY, INSCRIPTIONS, MEDALS. &c.

ANTIQUARIES. [Society of, in London.] This society was instituted in 1751, and is principally directed to the study of English or local antiquities, rather than the extended science called Archaiology. They have weekly meetings every Thursday evening in the winter season, at their rooms in Somerset Place. A similar society was founded in Edinburgh, in 1780. See ARCHAIOLOGY.

ANTIQUE. [Fr. *antiquus*, Lat.] *In all the arts.* That which is of genuine antiquity. This term, as used in the language of the FINE ARTS, denotes such works as were executed by the ancient Greeks and Romans; thus we say, an antique bust, an antique statue, an antique torso, &c. See SCULPTURE. The French speak of it with just admiration, and have named it *le bel antique.* In those works of genuine antiquity that possess real merit (for it is not to be antique alone that justifies the praise of the judicious critic), their distinctive character is beauty of form in general; and the supreme beauty of the human form in particular; but above all, majesty, grandeur, and elevation of character in their heads; a true and noble expression of the passions, subordinate however to that of beauty. In general we find that the ancients rather sought to represent ideal beauty than simply to imitate nature, except in those splendid and unique exceptions to this practice, the Elgin marbles.

To arrive at great perfection in any of the three branches of the FINE ARTS, the artist must zealously study the antique, and form his taste in contemplating them, so that he may attain that truth and grandeur of style which characterize the artists of antiquity. The artists of the modern Roman school, who endeavoured more than any others to carry into their studies these grand models of perfection, were for this reason superior, in their day, to any other modern school, and a similar reason is raising that of Great Britain to a like superiority. London, Paris, Rome, Florence, and other large cities have collections of the finest antiques that have been found in Greece and Italy, for the use of their students in art; and the labours of industrious and able artists have brought into our libraries the finest remains of architectural splendour, as studies of the highest order. Almost every country in Europe has collections of antique sculptured gems and medals: and those who are deprived of the enjoyment of using or seeing the originals are amply supplied by casts and impressions, taken in the manner invented by our ingenious countryman Tassie, which are superior to engravings or drawings. The study of the antique is decidedly indispensable to artists, for it was by the assistance of this study, and a careful observance of nature, that formed the greatest modern artists, such as Raffaelle, Michael Angiolo, Poussin, Caracci, &c., and which has rendered them such universal objects of admiration. The finest collection of antiques are in the Museum at Paris (see MUSEUM); the British Museum, London (see MUSEUM, BRITISH); Wilton House; Lord Elgin's matchless collection (see MUSEUM, ELGIN), &c. &c.

ANTIQUITIES. See ARCHAIOLOGY.

APARTMENT. [from *a parte mansionis.*] *In architecture.* Part of a house, or set of rooms complete in themselves, and set apart from the rest of the house, where one or more persons, or a family, may inhabit, and is in itself a complete habitation.

APERTURES. [*apertura*, Lat.] *In architecture.* The openings in a building, such as doors, windows, staircases, outlets, and inlets, for light, smoke, &c. They ought to be as few in number, and as moderate in dimension as possible, and never made too near the angles of the walls. Windows and doors ought also to be over each other, solid over solid, and aperture over aperture.

APLUSTRUM. [Lat. ἄπλουστρα, Gr.] *In sculpture.* An ancient ornament at the loftiest part of the stern of the ship, composed of various coloured materials. It is probable it might be their colours or flag. It was sometimes used as an ornament for the frieze, the pediment, and porticos of temples dedicated to Neptune.

APODYTERIUM. [Lat. ἀποδυτήριον, Gr.] *In architecture.* Among the ancients the apodyterium was the undressing room for the bathers before they entered into the bath; also a similar room in the palestra, for undressing before the gymnastic exercises. See BATH, PALESTRA.

APOLLO. *In mythological sculpture and painting.* A celebrated deity of Greece and Rome, the supposed inventor and patron of all the fine arts. He was the son of Jupiter and Latona, born in the island of Delos, at the same birth with Diana. He was accounted the god of physic, divi-

nation, and poetry, and was called Sol in heaven, Bacchus on earth, and Apollo below the earth. The statues and busts of this god are always to be distinguished by the beauty of the face, being represented in all the *antique* statues with an air of supreme divinity. He is handsomer than Mercury, and not so effeminate as Bacchus, who is his rival for beauty. His features are extremely fine, and his limbs exactly proportioned, with as much softness as is consistent with strength. The ancient sculptors always represent him as young and beardless; and his long beautiful hair, according to the poets, when unconfined, fell in natural easy ringlets down his shoulders, and sometimes over his breast, from which circumstances he is sometimes distinguished by the epithets crinitus and intonsus. See *Ovid's* Met. lib. i. ver. 564. *Hor.* lib. vi. od. vi. ver. 1. 3. od. iv. ver. 62. *Æn.* lib. ix. ver. 638, &c. On account of the hair, a Bacchus might sometimes be mistaken for an Apollo. Virgil in the third Æneid, v. 119. calls him the beautiful; and Tibullus, lib. 2. el. 3. v. ii. the well shaped god. The various characters of Apollo among the Romans were *Apollo Venator*, who presided over the chase; in which character is the *Apollo Belvidere* (see APOLLO BELVIDERE); the *Musical Apollo*, called *Vates*, or *Lyristes* (see APOLLO MUSAGETES); the *Actian Apollo*, who assisted Augustus at the battle of Actium, a statue of whom stood on the promontory of Actium, or Leucate, on a place called the Lover's Leap (see *Ovid's* Epis. 15. v. 175), which was visible a considerable distance at sea, and was worshiped by the mariners (*Virg. Æn.* 2. v. 275), to which Augustus is said to have addressed his devotions before the battle of Actium; the *Apollo Medicis* (*Vide* the LYCIAN APOLLO); *Apollo the Tormentor*, from an antique statue representing him flaying Marsyas alive with his own hands. The finest antique statues of Apollo now in existence are the following:—

APOLLO BELVIDERE is esteemed the most excellent and sublime of all the ancient productions. It was found about twelve leagues from Rome, in the ruins of ancient Antium, and purchased by Pope Julius II. when a cardinal, who removed it to the Belvidere of the Vatican, from whence it takes its name, and where it remained three hundred years. There is a good copy by Wilton, and also an admirable cast from it in the Royal Academy of London.

APOLLO MUSAGETES. Another celebrated antique statue, which takes its name from its occupation as Musagates, or conductor of the songs of the muses. It is of Pentelican marble, about five feet eight or nine inches high, dressed in a long loose tunic, fastened round the waist by a girdle; the chlamys is fastened on his shoulders, and falling into graceful folds behind him, he appears listening attentively, and is accompanying the songs on the greater lyre. VISCONTI, who was formerly conservator of the statues in the Napolean museum, in which was placed this statue, thinks that this dress is that of the *Citharides*, or players on the lyre, and that it is an antique copy of the *Apollo Citharides of Timarchides*, which was formerly in the portico of Octavia at Rome, with the nine muses of Philiscus.

This statue was found at Tivoli in 1774, in the ruins of the country house of Cassius, called the *pianella di Cassio.* The head, bound with laurels, has been broken off, but is the original; the right hand and part of the lyre are modern restorations. In the British Museum is a fine basso rilievo, representing a Victory offering a libation to this deity.

APOLLO THE YOUNG. Another antique statue, of Greek marble, about three feet six inches high. It has suffered much from the dilapidation of time and fractures, and has several modern restorations which are not effected in a happy or congenial style with the antique. The head is modern, and the hair ill disposed.

The torso alone is antique, and in so fine a style that it occasions much regret at the loss of the other parts of the figure. He is represented as holding an ill formed modern lyre on the trunk of a tree. In enumerating the best statues of Apollo, we must not forget a fine bronze one of the god, in the fourth room of the Townley Gallery, or department of antiques in the British Museum; and a head of him in the same room, of very early Greek workmanship.

APOLLO [the Lycian or Lycæan]. A fine antique statue, of Greek marble. He is erect, in an attitude of repose, with his left arm on the trunk of a tree, round which a serpent is entwined, and his right hand placed gracefully on his head, in an action of repose. He is entirely naked, in the manner of the statue of that god which was in the Lyceum at Athens. From which coincidence antiquaries have given it its name. The serpent is an attribute of Apollo as the inventor of medicine, or as the ancients called him, in this capacity, the *Apollo Medicus.* If antiquaries have

named this statue from the Lycæum, it should be written the *Lycæan*, but if from the oracle at Lycia, the *Lycian*.

Apophyge. [Lat. ἀποφυγή, Gr.] *In architecture.* That part of a column where it begins to spring out of its base; sometimes called the shoot of the column.

Apotheca. [Lat. ἀποθήκη, Gr.] *In ancient architecture.* A storehouse, warehouse, or cellar where corn, wine, oil, &c. were deposited.

Apotheosis. [Lat. ἀποθέωσις, Gr. from ἀπο and θεως.] *In mythological painting and sculpture.* The act of deification or placing among the number of the gods. The custom of thus honouring eminent men is of very ancient date among the Greeks, who also consecrated on their medals the greater number of those whom they considered as the founders of colonies and of cities. At length, living princes often had the name of gods given to them on public monuments. This ceremony had its origin among the Romans at the deification of Romulus, as founder of their city; but was afterwards discontinued till the time of the emperors, when it was performed in imitation of the Greeks, by Augustus for Julius Cæsar. The Roman ceremony of apotheosis or deification is preserved to us on many monuments of antiquity, as well as in ancient writers; the most accurate of which is in the second chapter of the fourth book of the Works of Herodian. On these monuments the emperor is generally represented as being taken up to heaven by an eagle; on this account it was, that at the conclusion of the obsequies, an eagle was loosed from the highest part of the funeral pile, which, ascending with the flames towards the sky, amidst the shouts and cries of the people, was supposed to carry the prince's soul to heaven. In the representation of the apotheosis of an empress a peacock was often used in the stead of an eagle. The most remarkable sculptural descriptions of this ceremony are the apotheosis of Homer, which has been engraved and explained in several works, and principally in the Museo Pio Clementino. The apotheosis of Romulus is represented on a diptych, belonging to the counts of Gherardesca, and published by Buonarotti, in his Observations on Ancient Glasses; that of Julius Cæsar, upon an engraved stone in the treasury of Brandenburgh; that of Augustus, upon a large sardonyx, in the royal cabinet of France, and upon another in the cabinet of Vienna; that of Germanicus upon a sardonyx, also in the French cabinet; the apotheosis of Germanicus and Agrippina, under the characters of Ceres and Triptolemus, on a cameo in the same cabinet; the apotheosis of Titus, carved on the arch of Titus, at Rome; and that of Hadrian, on a basso rilievo, delineated in the 5th vol. Mus. Pio. Clem. This same museum also contains another basso rilievo, representing the apotheosis of Antoninus Pius and Faustina; and the apotheosis of Faustina, upon a basso rilievo of the capital, is delineated in the 5th vol. of the supplement to Montfaucon. This manner of consecration is described differently on medals, as those of the emperor by a radiated bust, by the eagle which conveyed the soul to heaven, by the thensa, drawn by four elephants or horses; by a phœnix; a funeral pile; an altar; a temple; and often by the word *consecratio* on the reverse. The apotheosis of empresses was designated on medals, by a peacock, by the carpentum, drawn by two mules, or by the lectisternium of Juno. *(See those several words.)*

Applique. See Musaic, Gem Sculpture.

Apsis. [Lat.] *In ancient architecture.* The embowed or arched roof of a room, the canopy of a throne, &c.

Aqua Fortis. [Lat.] *In engraving.* A corrosive liquor used in etching; made by distilling purified nitre, and therefore called by chymists spirits of nitre. It is divided into double and single, the single being only half as strong as the other. Artists who are in the habit of using these two sorts of acids call them generally aqua fortis; and only the more concentrated acid, which is much stronger than even the double aqua fortis spirit of nitre: this is a practical distinction of much utility, and will be retained in this work. See Etching, Engraving.

Aqua Marina. [Lat.] *In gem sculpture.* A gem, the beryllus of Pliny, of a transparent green blue, which ranks but low in value among the precious stones; but was often used by the gem sculptors of antiquity. It received its more common name from its seagreen colour.

Aquæduct. [*aquæductus*, Lat.] *In architecture.* A conveyance of any kind made for conducting water. This word is a compound derived from *aqua* water, and *ductus* led; and although any pipe or conduit is an aquæduct, yet the word is generally confined to a canal constructed of brick or stone, for conducting water through an irregular country to a city or town, with a regular necessary descent. An aquæduct may be either below or above ground, and sometimes is elevated on high piers and arches, forming a grand and regular ar-

cade, supporting a canal. Aquæducts have been divided into two species, visible and subterranean; the first are those carried across plains or valleys, and formed of piers and arches like those in the Campania of Rome, in the vales of Churk and Llangollen in North Wales; and in several parts of Italy and France. This sort of aquæducts are single, double, and sometimes treble; being composed of one, two, or three tiers of arches one above the other. Subterranean aquæducts are those which are carried through mountains or under ground, as in several parts of England and France. Aquæducts were unknown to the Greeks, and are, without question, among the noblest inventions of the Romans.

Sextus Julius Frontinus, a Roman author, of consular dignity, who had the sole direction of the aquæducts under the emperor Nerva, and has written a treatise on this subject; affirms them to be the clearest marks of the grandeur of the empire. He mentions nine aqueducts which had thirteen thousand five hundred and ninety-four pipes of an inch and upwards in diameter.

The first invention of them is attributed to Appius Claudius, the censor, in the year A. V. C. 441, who brought by this means the water into the city, by a channel eleven miles in length; which was inconsiderable when compared with those that were afterwards carried into the city by the emperors and other persons; several of which were cut through the mountains, and other impediments for distances of thirty, forty, to sixty miles in length; and of such a height, that a man on horseback, as Procopius informs us, might ride through them without the least difficulty; (See *Procopius de Bell. Goth.* lib. 1.) the vaults and arches being in some places one hundred and nine feet high. Procopius makes the aquæducts in his time (about the year A. V. C. 530) to be fourteen; but Victor, in his *Descrip. Urb. Region.* makes the number to be twenty. These aquæducts are generally distinguished by the name of the place whence the waters flow, or of the person who built them, joined to the word *aqua* water; as follows *Aqua Marcia*, by some supposed to be the most ancient, and to have been erected by Ancus Marcius; *Aqua Appia*, which Frontinus declares to be the first; *Aqua Tepula; Aqua Julia; Aqua Virgo; Aqua Vetus; Aqua Alsietina*, or *Augusta; Aqua Claudia; Aqua Crabra*, or *Damnata; Aqua Trajani; Aqua Alexandrina; Aqua Septimiana*, &c. The grandest of which was the Aqua Claudia, erected under the emperor Claudius.

The Romans, animated by a spirit of improvement and magnificence, erected aquæducts in almost every place under their dominion; as at Cataneo, at Salona, at Smyrna, Ephesus, Alexandria Troas, Evora, Athens, &c. Among the most magnificent of which were the aquæducts of Segovia, of Metz, and that of Nismes, known by the name of the *Pont du Gard*. At Arcueil are also the remains of an ancient aquæduct built by the Romans.

Modern aquæducts must not be compared with the magnificent ones of the Romans, although eminent for utility. The largest work of this kind is the aquæduct of Caserte, called *Aquedotto Carolino*, built by Vanvitelli; and which conducts the water a distance of nine leagues to the palace and gardens of the King of Naples. The aquæduct of Maintenon, near Versailles, if it had been finished, would have been the grandest modern effort to rival the ancients. It is seven thousand fathoms long, and contains two hundred and forty-two arcades. England has but few aquæducts of large size; that built by the Duke of Bridgewater over the river Irwell is one of the largest. It is six hundred feet long and thirty-six feet wide, crossing the Irwell on three large arches, the centre of which is sixty-three feet in span, and is carried with amazing labour through a valley filled up to receive it. The effect of coming down the river with barges of great burden, towing along it, and looking up to another navigable river supported in the air, with barges, &c. sailing upon it, forms a grand and singular scene. The whole aquæduct (as it may be termed) is not supported upon the arches only, but is embanked up on each side, across a large valley. There are several other aquæducts in the course of the duke's canals, some over roads and others over rivers, through all of which the navigation is kept up. For an account of Roman aquæducts, see Julius Frontinus, *de Aquæductibus, Urbis Romæ*. Mountfaucon, vol. iv. plate 128. Plin. *Hist. Nat.* lib. xxxvi. cap. 15; and for an account of modern aquæducts see *Phil. Trans. Abridged*, vol. i. p. 594.

Arabesque. [Fr.] *In painting and sculpture.* After the Arabian manner. Arabesques or moresques are a style of ornaments which are composed of a whimsical mixture of flowers, fruits, buildings, and other objects; to which are joined, by some artists, the figures of men, women, animals, real and imaginary monsters, &c. used in painting, sculpture, and architecture. In pure ancient arabesques, such as are found in the Alhambra, no animal representations

are used. Although the Arabians may have been the restorers, or modern inventors of this species of decoration, yet it certainly had its origin in very ancient times. Some writers find its origin in those leaves and flowers with which the Egyptians, and even the Greeks, decorated their edifices, and which were used as borders to many of the antique vases; but the resemblance is too slight to stamp much credit on the conjecture. A more rational idea is, that the arabesque ornaments were suggested to the Greeks by the oriental tapestries, which they much admired, on which were wrought the most fantastical compositions of plants, animals, &c., and which probably gave rise to many of the fabulous animals of poetry; such as centaurs, griffins, chimeræ, &c. The Greeks named these cloths *Zodia*, from the animals they contained. It is not possible to say now whether the Greeks first employed this species of ornament in painting to decorate panels, vases, &c. in the interior of their apartments; or in sculpture for the exterior: how far the fact may direct us of the Temple of Apollo Didymæus, near to Miletus, in Ionia, erected during the best time of Grecian art, which had its frieze ornamented with foliage and griffins, and its pilasters with ornaments similar to those called arabesque, and which had genii springing from the foliage of the acanthus, is difficult to ascertain. This species of ornament was not known in Rome till near the time of Augustus, when, it is probable, they were introduced from Alexandria; for Vitruvius, who lived at this period, speaks of them with the expression *audacia Ægyptiorum in pictura*, as novel introductions into Rome. The Romans loved the arts, from the opportunities they afforded them of displaying their riches, and of gratifying their love for splendour and magnificence. This disposition introduced by degrees a greater latitude in their composition, and which became more and more costly in their materials, and varied in their designs; such as the most showy flowers and beautiful foliages, delicately and agreeably entwined, and figures springing from the calices of flowers. The ornaments upon many antique Greek vases, upon the walls of Herculaneum, the ruins of the baths of Titus at Rome, Hadrian's villa at Tivoli, the palace of Diocletian, the edifices of Pompeii, and others, are among the most elegant ancient examples of this species of decoration. In spite of the censures of Vitruvius and Pliny, arabesques not only prevailed but increased in Rome down to the last edifices of the lower ages. They have also been discovered in gothic buildings, in glass, in musaicks, and in pavings, in all varieties of exuberant, unrestrained ornaments. The Arabians, in giving their name to these works, in which they so much excelled, carried the style to all the perfection to which it was susceptible. Yet, from the restrictions of their religion, which prohibited the introduction of men, women, and animals, they are inferior, in variety and beauty, to those of the ancients. The arabesque of the Goths, or, as it has been called, the arabotedescho, was more exaggerated, but less elegant. A novel mixture of Christian and Pagan subjects rendered them, in many instances, complete burlesques. These defects, and the consequent discredit brought upon it, and upon the style of architecture it was intended to embellish, caused it to decline till the discovery of the ruins of ancient art, which presented the purest models, restored the taste of this wild and romantic species of ornament, and of the arts in general. Raffaelle perceived, in the style of the arabesque, a gaiety and freedom of style that would soften the arid stiff manner of his predecessors and cotemporaries: and therefore employed it in the decoration of his grandest works. No painter has since employed it with such taste as Raffaelle, and the only good modern arabesques are of this great artist's school. One of his most admired compositions, in this style, is the fine allegory of the seasons, with an arabesque which represents the ages of life, under the forms of Parcæ. After the death of Raffaelle, arabesque degenerated in Italy, both in design and execution, till at last it changed both its forms and proportions. To the light and playful grottesque succeeded the gigantesque of decoration, of which Michael Angiolo, in the Sistine chapel, has given the most imposing and grand models. After the discoveries of Herculaneum, Pompeii, and of the Villa Negroni, &c. the imitation of the antique began to spread the taste of the arabesque again in Italy. Primaticcio, Rozzo, and other Italian artists, brought by Francis I. into France, introduced there a style of decoration less approaching the arabesque than the gigantic style of Michael Angiolo, as may be judged from the sculptures in the chateau de Gaillon, and in the paintings at Fontainbleau. This taste prevailed in Italy at the time of Louis XIV. supported by the Caracci and other artists of celebrity. The French artists followed the style, and Versailles shows their talents. It prevailed from Le Brun to Mignard,

and governed all the ornamental style of the seventeenth century. Audran executed some arabesques in a good style, and with much spirit and invention, in the castles of Seaux, Meudon, and Chantilly. The arabesques of *Berin*, of *Gillott*, and *Vateau*, which were designed as patterns for the manufactory of the *Gobelins*, of tapestry, &c. for the king's apartments, to which, as well as to the furniture, they injudiciously applied these ornaments, did not obtain much praise, either for invention or faithful imitation of approved models. Arabesques, however beautiful, should only be applied to small objects, or they lose their character; they should never be used in such places where gravity of style is required, or regularity of design agreeable. See ALHAMBRA.

ARABO-TEDESCHO. *In painting and sculpture.* [From *arabo* and *tedescho*, German.] A style of art exhibiting a mixture of the Moorish, or Low Grecian, with the German Gothic.

ARÆOSTYLE. [from ἀραιὸς wide, and στυλος a column.] *In architecture.* Columns thin set. One of the five manners of arranging intercolumnations mentioned by Vitruvius, which are pycnostyle, systyle, eustyle, decastyle, and ræostyle. The ræostyle is almost restricted to the Tuscan order, which, from originally having wooden architraves, was best adapted to it. This distance of the columns in ræostyle should be four of the diameters of the shaft of the columns, which diameter should be an eighth part of their height. See PYCNOSTYLE, SYSTYLE, EUSTYLE, and DECASTYLE.

ARÆOSYSTYLE. [From *ræo* and *systyle*.] *In architecture.* A modern manner of arranging intercolumniations, invented and named by Perrault, and first used by him in the principal front of the Louvre: it consists of placing columns in pairs, and throwing the two intercolumniations into one. Blondel condemns this method with much severity in his work on architecture.

ARCADE. [Fr.] *In architecture.* A continued arch, or series of arches, elevated on piers or columns. Arcades are constructed for various purposes; sometimes for the carrying an aqueduct (see AQUÆDUCT), or a bridge, or in the thickness of a wall of a building for apertures. They are most characteristic when employed in buildings of a solid and simple style, such as markets, exchanges, interior courts of palaces, &c.

ARCH. [*arcus*, Lat.] *In architecture.* A building formed of a segment of a circle, used for bridges, covering apertures, &c. supported by piers, columns, or abutments (See these words). The most usual denominations of arches are circular, elliptical, cycloidal, parabolical, hyperbolical, caternarian, equipollent, equilibrial, &c. according to their figure or quality. There are also semicircular, semielliptical, segmental, and compound arches, of various denominations. Circular arches are of several kinds, according to the different parts of a circle. A semicircular arch is composed of half a circle; a scheme, or segmental arch, is any segment less than a circle; and gothic, or pointed arches, consist of two circular arcs excentric, and joined in an angle at the top, each being one-third, or one-fourth, &c. of the whole circle. Elliptical arches are formed of a portion of an ellipsis (see ELLIPSIS), and are, in the opinion of some mathematicians, the best calculated for the construction of bridges, as they look bolder, are stronger, and require less materials and labour than the others. Cycloidal arches are constructed of the cycloidal curve, and reckoned, by Dr. Hutton, the best, after the ellipsis, for the above purpose. The learned doctor reckons the circle next. And as to the others, the parabola, hyperbola, catenaria, &c. he says they should not be at all admitted into the construction of bridges of several arches; but may, in some cases, be used for a bridge of a single arch, which is to rise very high, because then they are not much loaded on the haunches. (See VAULTS, BRIDGES, &c.) The best treatises on the subject of arches are Dr. Hutton's Mathematical Dictionary, and the same books recommended under the article ABUTMENT, which see.

ARCH [Triumphal]. See TRIUMPHAL ARCH.

ARCH [Sepulchral]. See SEPULCHRAL ARCH.

ARCHAIOGRAPHY. [from ἀρχαῖος ancient, and γράφω I write.] *In archaiology.* A writing or treatise on antiquity, applied by some writers to descriptions of works of ancient art; but now superseded by the word archaiology. See ARCHAIOLOGY.

ARCHAIOLOGY. [from ἀρχαιος ancient, and λόγος a discourse.] A discourse on antiquity, or on the manners and customs of the ancients. Archaiology, or the science of antiquities, is a study as comprehensive and extensive as any in the circle of the arts or sciences: since it implies all testimonies or authentic accounts that have come down to us, illustrative either of the particular or universal history of ancient nations. This study is so essential in the education of an artist, that no historical

painter can arrive at eminence without it. To enter elaborately into this useful science would be to occupy more space than the whole of the present work, and to rewrite numberless treatises. Archaiology embraces the manners, customs, theology, political constitution, religious ceremonies, the laws, policy, private lives, the works of authors and artists, diplomas, public acts, inscriptions, monuments of the arts; such as remains of architecture, sculpture, painting, glyptics, numismatics; of ancient nations and people; the remains of their mechanical arts and inventions, as their utensils, arms, machines, &c. This science has been divided by some into several subdivisions, as *archaiology*, properly so called, when devoted to the description of the antiquities of a nation, as the works of Josephus and Dionysius of Halicarnassus; *archaiology* literary and plastic; the *former* when directed to the study of alphabetical characters, manuscripts, inscriptions, &c. (see INSCRIPTIONS); which is again divided into *palaiographic*, when relating to inscriptions on stone, &c.; and *diplomatic*, when it investigates papers, titles, or diplomas. *Plastic archaiology* is that which investigates the fine arts of the ancients, and is directed to the study of the remains of ancient painting, sculpture, and architecture.

However, many nations of the ancient world (which refers generally to those before the Christian era) may have arrived to a certain degree of perfection in the arts, yet this latter branch of the science is particularly understood to refer to the four principal; namely, the Egyptians, the Greeks, the Etruscans, and the Romans. Among the best treatises on this science are *Archæologia Attica, by Rous*, 1670. *The Asiatic Researches, by Sir. W. Jones*, 1788, *and London*, 1801. *The Antiquities of Rome, by Dionysius Halicarnassus.* ROSINUS's *Antiquities.* CAUTELIUS *de Romana Republica.* MANUTIUS *de Legibus Romanis.* The works of *Herodotus, Pausanias, Strabo, Diodorus Siculus, Plutarch, Pocock, Norden, Sonnini, Denon, Dio Cassius, Tacitus, Cæsar, Pliny, Scaliger, Casaubon, Gravius, the Daciers, Ferrarius, Rubenius, Paulus Minutius, Kirchman, Ammianus Marellinus*, &c. *Josephus's Antiquities of the Jews. The Works of the Antiquarian Society of London, &c. Calmet's Dictionary of the Holy Bible. Jablouski's Pantheon Egyptiacum. Maurice's Indian Antiquities. Stuart's Antiquities of Athens. The Ionian Antiquities. Voyage Pittoresque de la Grèce. The Museum Worsleyanum*, HAMILTON'S *Egyptiaca*, &c.

The finest relics of plastic archaiology are in the British Museum, formerly called the *Townley* Marbles; the *Arundelian* and *Pomfret* collection at Oxford; *Lord Elgin's* stupendous collection from Athens; and the Phygaleian marbles also in the British Museum; and the various galleries of antiquities in Paris, Vienna, Naples, &c.

ARCHITECT. [ἀρχίτεκτων, Gr. from ἀρχὸς chief, and τέκτων a workman, artificer, or artist; *architecton*, Lat.] A professor of the art of building; a chief builder; one skilled in planning or designing buildings. The mental acquirements and natural qualifications necessary for a professor of this art, as insisted upon by Vitruvius (lib. i. c. i.) and other writers on architecture, are numerous and difficult of attainment; have caused the study of architecture to be ranked among the highest branches of human knowledge; have dignified the excellent among its professors, and have enlisted in its ranks enlightened men from every class of society.

Pythius, an ancient architect, who designed a magnificent temple, at Priene, dedicated to Minerva, whose writings are cited among others by Vitruvius, says, that an architect should be more expert in every profession connected with his art than the ablest professors of each art respectively. Vitruvius, however, does not assent to this, but observes "that the human mind cannot arrive at perfection in so many difficult and various parts of knowledge. It is even rare in the course of a century to find a man superlatively excellent in any profession; why then is it expected that an architect should equal Apelles in painting, Myron and Polycletus in sculpture, Hippocrates in medicine, Aristoxenus in music, or Aristarchus in purity of language. Pythius should have remembered that every art consists of two parts, theory and practice; the latter of which appertains peculiarly to its professors; but the former is common to them, and to the learned in general. If, therefore, an architect be sufficiently master in all the arts connected with his profession, to judge perfectly of the merit of their productions, it is the most that should be insisted upon; and, if so qualified, he shall not need to blush at his own insufficiency."

An art, therefore, which like architecture requires a theoretical knowledge of such a variety of studies, connected remotely therewith, as well as a practical acquaintance with so many others of immediate importance, is only to be acquired by an entire devotion to its pursuits, and a long and constant application to its studies. "Chi vuol esser architétto," says

Milizia, "abbia una mediocrità di fortuna, e possegga un gran capitale di morigeratezza, e di disinteresse. Il disinteresse deve esser in ragione dell' importanza dell' arte. Qual' arte più importante dell' architettura? Ella è *l'arte per eccellenza, e regolatrice delle altre.*" It is, therefore, not to be wondered at, that able architects have always been held in high esteem and honour by the great and powerful. The architects of Greece and Rome were thus honoured, and even those monarchs who have been calumniated by the title of Goths have duly estimated such acquirements. In a letter, extant, from Theodoric, King of the Goths, to Simmachus his architect he concludes his instructions and wishes concerning his proposed palace, with observing that the public distinctions which he shall confer upon his architect are, that he shall in all public processions and meetings stand next to his royal person in the centre of a numerous cortege, should bear a wand of gold in his hand, and other distinctions which should announce the high confidence with which the king was pleased to honour the architect to whom he entrusted the building of his royal palace.

It is unnecessary to refer back to ages long since past away, for the origin of the builders' art. From the period that men began to apply remedies to the inconveniences of the seasons may be dated its rise among the infant arts, and its progress may be traced wherever the severities of the climate demanded either shelter or shade, or the increased knowledge of the people introduced the cultivations of the arts and of literature. The theories of some authors, who trace the origin of architecture from the huts of the antediluvian world, which were formed of branches of trees, thatched and covered with leaves, may not be far fetched, but there is no occasion to search so far back into the records of time for the origin of its primitive elements, when it may be traced in the present day in the Indian's hut, or the Laplander's cave; and still exhibits from what mean originals it rapidly sprung up to Grecian perfection. As necessity was its parent, so was convenience its first object: decoration, ornament, and magnificence were the results of refinement, and introduced to flatter the ostentation, or to display the wealth of the owner of the fabric; but convenience, the first and best object of the art, should ever be the primary view of the architect. Every building is erected to answer some particular purpose, and the most obvious and simple means are always the best adapted to obtain the end required. When a plan so constructed is uniformly, consistently, and characteristically arranged, when all its required purposes are obtained, when all its uses may be comprehended at once, and it appears applicable and adjusted to its proposed object, then the architect is at liberty to add suitable ornament, decoration, elegance, and grandeur of style, to convenience, strength, and propriety, and to finish the whole with the full blown splendour of beauty and grace, which are never to be obtained, but by the union of propriety with what is merely ornamental.

By this division of the elements of architecture into utility and beauty, it is obvious that it is both an art and a science, and that the architect should be both an artist and a philosopher; that it is a useful and a fine art; the first or scientific part of architecture is mechanical, and may be acquired; the latter, or the art, depends much upon what is called genius, which like poetry is partly innate, and though difficult to acquire, where a natural predisposition is wanting, may be considerably improved by study and a contemplation of works of acknowledged taste and superiority. The one requires the aid of imagination and fancy, grows poetical in design, and picturesque in decoration, and is innate; the other lays down fixed and stated rules, proceeds in the same track of reasoning, and comes, for obvious reasons, to the same conclusions, and is to be acquired. Hence many a self called architect, whose Corinthian face is his most valuable quality, has proved to be nothing but a mere mechanic; and many a would-be genius to be ignorant even of the elements of the art which he had made it his duty to understand. To form a complete architect, both must be united; for the necessities of a plan are often misunderstood, and a glaring pile of useless beauty mocks the possessor with a dream of grandeur which he cannot enjoy.

The true foundation of the education of an architect are the mathematics, and the superstructure, those many and singularly opposite attainments which have been before recited.

The architectural student who is being educated, as Sir William Chambers properly observes, "rather to be a learned judge than a skilful operator," having qualified himself for the world by a proper school education at least, should begin with ARITHMETIC, which is the ground work of his future operations in mensura-

tion, either as to extent or solidity; being the medium of all calculation, and the only road to a practical knowledge of mathematics. "For he," as an able cotemporary (Mr. Joseph Gwilt) forcibly observes, "is a sorry architect who is a bad mathematician."

GEOMETRY follows; the importance of which science is beyond calculation. It is, indeed, the foundation on which the student can alone build his future works; and it cannot be impressed too often or too strongly upon their minds, that it is impossible to attain any perfection in architecture without it. It is geometry alone that can lay down all the first principles in construction, that adjusts bearings and proportions, and measures points, angles, and solids. In short there is no being a master of architecture without being an adept in the science of geometry, and the architect who is so, though he may perchance err in decoration and ornament, can never do so either in strength, proportion, or construction.

MASONRY, both in brick and stone, which is a part of constructive architecture, or the mechanical executive means of raising perpendiculars, turning arches, building walls, with their various apertures, as doors, windows, recesses, chimneys, &c.; erecting bridges, forming staircases, and other works in operative masonry, is another important branch of the architect's studies; which with CARPENTRY, and the inferior mechanical arts, must be understood by him with accuracy, and be practised with readiness, as being the executive department of his art.

SURVEYING, levelling, hydrostatics, and other of the mixed and applied sciences are likewise of primary importance to the architect, and must be cultivated both theoretically and practically. Levelling at once enables him to comprehend the value of local situations, and often to amend them when bad; and hydrostatics, when applied to his wants, directs him in the conveyance, direction, and raising of water, the construction of hydraulic machines, the draining of low and marshy grounds, and the means of collecting and managing reservoirs, and employing them to the most advantage both for use and beauty. In short on these studies depend, not only the necessary supply of water for domestic use, but also all the beautiful effects that can be produced by a judicious combination of the chaotic parts of uncultivated nature, by the construction of basins, lakes, fountains, cascades, and other ornamental and useful application of this element.

MECHANICS is also another indispensable science to be studied by the architect. It is by a due understanding of mechanics, its powers and effects, which the learned Dr. Wallis defines as being the geometry of motion, that such machines are invented and constructed as alone are able to raise up the heaviest weights to the greatest of required heights; to empty waters from a bottom, to drain a morass, or force the water by the laws of hydrostatics, to situations where art directed by taste would dictate or necessity require. These various studies, together with the arts of sketching and drawing, are among some of the studies that are requisite in forming a complete mechanical architect. But when he is thus thoroughly initiated in them, so as neither to err in principle nor practice, if he cannot add as many more innate qualities of his own mind, towards their application to design, he is fit for nothing better than the overseer of a work, or a judge of the best methods of carrying on and finishing another's designs. But in one, whose duties and high station require him to design, "direct and manage great works, to govern and control numerous bands of clerks, inspectors, artists, artificers, workmen, and labourers *," additions of a very high mental class are requisite.

The architect's profession is both an art and a science, and to the preceding mechanical requisites, the mind, the art of design, and taste, are yet wanting to form a great master, such a one as would produce works that could vie with the ancient beauties of Greece and Rome. But if these qualities are not innate, they cannot be acquired. To be able to accomplish these great ends it is necessary that the student should possess good natural abilities, a fruitful imagination, abundant in mental resources, a pure taste for beauty both of forms and of colour, and a judgment, cool and sedate enough to direct his genius; without which the most brilliant imagination would wander as if blindfolded, and exert itself in vain. Genius, to borrow a beautiful idea from our great lyric poet Moore, should never be without the guidance of common sense. Without this superintendence, that great quality of the soul called genius, would run astray, particularly in an art like architecture, whose aim is utility, decorated with taste and beauty. Without this guide we should have to censure the wildness, instead of having to admire the beauty; we should be dissatisfied with the unnecessary irre-

* Introduction to Sir Wm. Chambers's Treatise on Civil Architecture.

gularity, instead of being delighted with the harmony of decorated magnificence. Though genius, or that quality of the mind which is so named, cannot be acquired where it is entirely wanting; yet where it exists even in a small degree, it may be cultivated and improved; and, though the talent of design or invention is innate and coeval with the intellect, it is to be methodized and trained by study and observation, or it will be but a barren tree from exuberancy and wildness.

The principal points, therefore, that the architectural student should keep in view, when he commences the art of design or composition, are convenience, strength, and beauty. As to convenience no general directions can be given, since it is no more than contriving all the requisites belonging to the composition in the most clear and lucid order, and then arranging them in the most perfect and economical manner in the proposed space. Strength is acquired by just construction, and the fewer materials by which it is obtained, consistent with proportion, the better. Beauty is the key stone of the fabric, it completes the structure, and gives it a determined character. Magnificence and splendour are excesses of beauty, simplicity its greatest charm. Yet neither magnificence, splendour, nor simplicity are inconsistent in themselves with beauty, although they may and often do exist without it. The elements of beauty and magnificence in architecture are boundless; therefore they require judgment in their application; and although many volumes have been written upon them, many more may yet be added. Simplicity, symmetry, and proportion are mostly the ground works of beauty and decoration; ornament and splendour of magnificence. The one is the leading character of the Grecian style of architecture, and the other of the Roman. What can be more simple, or possess more of symmetry and proportion without exuberance, than the sacred buildings of the Greeks, or what more decorated and magnificent than many of the gorgeous edifices of the Romans; and yet both styles possess the character of beauty. Many of the architects of the present day have yet to learn the fatal effects of pedantry and servile imitation; mistaking on one hand baldness for beauty, and on the other, overloaded ornament for decoration. It is certain, that the fewer parts of which a building is composed, if distributed with harmony and proportion, the more beautiful it will appear: not agreeing, however, with Mr. Burke's doctrine of smallness, smoothness, and delicacy being essential to this character. The eye is best pleased in seeing the whole of a composition at once, without travelling from object to object for the purpose of comprehending it, which is accomplished only with difficulty and pain; attention is distracted, and the mind forgets one moment what it had observed before, carrying away but an imperfect recollection of the whole: yet contrast is however necessary in this austere simplicity, and is always to be found in the best examples of the elements of composition in architecture, which like those of the same department in music, are various, and in themselves discordant, till arranged and harmonized by the skill and judgment of a master. Monotony in form betrays a poverty in imagination, and is a similar defect in architecture, as dullness is in literature. The mind is satiated, and turns away dissatisfied. An architect with but one idea is like the painter who, it is related, could paint no subject but the judgment of Solomon, and repeated it in large and small in every room of his patron's mansion. A principal thing therefore in architecture is to design simply and with sufficient variety for interest and contrast. Not, however, with as many different sorts of windows in a front as if it was intended for a pattern card of dressings.

The art of drawing and of designing in *perspective* is also another essential portion of a young architect's education. It demands a considerable share of his attention, as few things contribute more to a coincidence of parts and unity of design than a knowledge of its laws and their dependance upon optics. By working the entire composition in perspective, the relation of the several parts to each other, as they would appear when finished, are perceived; and a just subordination of parts, like what the painters term *keeping*, is preserved. This is the more necessary, for in all buildings, as in all pictures there must be one principal or leading feature, to which all the others must be subordinate; from whence the spectator must commence his examination of the parts, and to which he must return to survey the whole.

Decoration, or the choice and distribution of ornament, is also an important requisite towards forming a master in the arts. This portion of the art depends partly on innate genius, and partly on acquired taste and fancy, but both must be under the direction of the judgment. Ornaments are ill placed when they may be spared without being missed; ill chosen, when at variance with their situation, or with the character of the building they are

intended to decorate. Such as fetters, chains, shields, or thunderbolts in the theatre or ball room, the sculls of oxen, sheep, and other animals, with paterræ, sacrificial knives and other instruments and symbols of Pagan superstition in a Christian church. Ornaments may also be used with too sparing as well as with too lavish a hand. For empty spaces are absurd where nakedness is offensive to the eye, and where propriety would dictate or admit of appropriate decoration. All buildings of magnificence should be composed with regard to the principal part from which they are to be viewed. If they are to be viewed, or can be seen from a distance, their component parts should be simple, large, and broad. If only at a short distance the parts may be smaller, be in more abundance and executed with neatness and elegance; that both may be seen and understood as the nature of their situation will admit. Upon the whole, nothing but nature, refined by a long study of the best ancient and modern examples, can enrich the mind and facilitate the hand sufficient to excel in this noble art.

The principal architects who have made themselves celebrated by their works and writings are the following; to which is added a brief account of their most important works, arranged chronologically, as to period in which they flourished.

Among the ancients: Erysichthon, the son of Cecrops of Athens, who built the temple of Apollo in Delos, which being afterwards enlarged at the expense of all Greece, was one of the noblest edifices of antiquity.

Theodorus of Samos, who flourished about the year 700. His works were the Labyrinth of Lemnos, which Pliny even prefers before those of Crete and Egypt; some buildings at Sparta, and the temple of Juno at Samos. To this artist the ancients ascribe many inventions of great utility in architecture.

Hermogenes of Alabanda, B. C. 650: He built the temple of Bacchus at Teios; and the temple of Diana at Magnesia. Agamedes of Delphi, B. C. 600: The first magnificent temple of Apollo at Delphi was the work of this artist and of Trophonius. Trophonius of Delphi, B. C. 600: (See Agamedes, above.) Memnon of Persia, B. C. 600: A palace of King Cyrus at Ecbatana. Chersiphron of Ephesus, B. C. 600: The first temple of Diana at Ephesus, which was burned by Erostratus. Demetrius of Ephesus, B. C. 540: He continued the building of the first temple of Diana at Ephesus, begun by Chersiphron. Pæonius of Ephesus, B. C. 420: He completed the building of the same temple, which took from two hundred and twenty to two hundred and forty years. Eupalinos of Megara, B. C. 500: Many edifices in Samos; a celebrated aquæduct there. Mandrocles of Samos, B. C. 500: The wooden bridge which was constructed, by command of Darius, over the Thracian Bosphorus. Chirosophos of Crete, B. C. 500: The temple of Ceres and Proserpine; the temple of the Paphian Venus; the temple of Apollo, all at Tegea. Pythius of Priene, B. C. 450: Design for the temple of Pallas at Priene; the celebrated mausoleum of Artemisia in Caria, in which work he was assisted by Satirus. Spintharus of Corinth, B. C. 450: He rebuilt the temple of Apollo at Delphi after it had been destroyed by fire. Agaptus of Elis, B. C. 450: Portico at Elis. Libon of Elis, B. C. 450: The temple of Jupiter Olympius at Olympia: equally celebrated for his architecture and for the statue of the same god by Phidias. Amphion of Thebes, B. C. 600: The citadel of Thebes, called Cadmea. Ictinus of Athens, B. C. 450: The temple of Pallas Athene or the Parthenon on the Acropolis at Athens; the temple of Ceres and Proserpine at Eleusis; the temple of Apollo Epicurius in Arcadia. Callicrates of Athens, B. C. 450: He assisted Ictinus in the erection of the Parthenon. Mnesicles of Athens, B. C. 450: The Propylæa of the Parthenon at Athens. Coræbus of Eleusis, B. C. 450: The Celesterium at Eleusis. Antistates of Athens, B. C. 450: A temple of Jupiter at Athens. Archias of Corinth, B. C. 400: Many temples and other edifices at Syracuse. Callias of Aradus, B. C. 400: Many temples and other edifices in Rhodes. Argelius, B. C. 400: The temple of the Ionian Æsculapius. Mnesthes, B. C. 400: The temple of Apollo at Magnesia. Cleomenes of Athens, B. C. 359: The plan of the city of Alexandria in Egypt. Dinochares of Macedonia, B. C. 350: He rebuilt the temple of Diana at Ephesus; continued the builing of Alexandria; and proposed to transform Mount Athos into a colossal figure. Andronicus of Athens, B. C. 350: The tower of the winds, still standing at Athens. Epimachus of Athens, B. C. 300: A storm tower. Sostratus of Guidus, B. C. 300: The Pharos of Alexandria. Philo of Athens, B. C. 300: He enlarged the arsenal and the Piræus at Athens; and erected the great theatre in that city, which was rebuilt by order of Hadrian. Eupolemus of Argos, B. C. 300: Several temples and a theatre in that city.

PHÆAX of Agrigentum, B. C. 200: Several works at Agrigentum. COSSUTIUS of Rome, B. C. 196: Design for the temple of Jupiter Olympius at Athens. HERMODORUS of Salamis, B. C. 100: The temple of Jupiter Stator in the Forum at Rome; the temple of Mars in the Circus Flaminius at Rome. MUZIUS of Rome, B. C. 100: The temple of Honour and Virtue, near the trophies of Marius at Rome. VALERIUS of Rome, B. C. 100: Several amphitheatres with roofs. BATRACHUS of Laconia, B. C. 40: Several temples at Rome were built by him and SAUROS. (See ALLEGORY.) The churches of St. Eusebius and S. Lorenzo fuori le mura at Rome, contain some columns whose pedestals are sculptured with a lizard and a frog, as alluded to in that article. SAUROS of Laconia, B. C. 40: (See the preceding). POLYCRITUS. DEXIPHANES of Cyprius, B. C. 40: He rebuilt the Pharos of Alexandria, by command of Cleopatra, after the former one had fallen down. CYRUS of Rome, B. C. 35: Cicero's Villa Tusculana, or at least some of the buildings belonging to it.

POSTUMIUS of Rome, B. C. 30: Many works at Rome and Naples. COCCEIUS AUCTUS of Rome, B. C. 30: The grotto of Pozzuolo and likewise the grotto of Cumæ near the Lago d' Averno. FUSSITIUS of Rome, B. C. 30: Several works at Rome. He was the first who wrote on the subject of architecture at Rome. VITRUVIUS POLLIO of Formiæ, after Christ, 1: A Basilica Justitiæ, or a court of justice at Famo. He is chiefly eminent for his invaluable works on architecture. VITRUVIUS CERDO of Verona, A. C. 1: A triumphal arch at Verona. CELER of Rome, A. C. 50: The golden house of Nero, built by him and Severus. SEVERUS of Rome, A. C. 50: See CELER. RABIRIUS of Rome, A. C. 80: The palace of Domitian on Mount Palatine. MUSTIUS of Rome, A. C. 90: A temple of Ceres at Rome. FRONTINUS of Rome, A. C. 100: He was the author of a remarkable work, still extant, on the Roman aquæducts, and quoted in the article AQUÆDUCT, which see. APOLLODORUS of Damascus. The celebrated Forum Trajani at Rome; the bridge over the Danube in Lower Hungary. LACER of Rome: A bridge over the Tagus in Spain; and a temple, now dedicated to San Giuliano. DETRIANUS of Rome. The Moles Hadriana and the contiguous Pons Ælius; the present Castello and Ponte Sant Angelo. Several other magnificent edifices in and near Rome. ANTONINUS, the senator of Rome. A pantheon at Epidaurus; the baths of Æsculapius. HIPPIAS. Various baths. NICON of Pergamus, A. C. 150. Several admirable works at Pergamus. Besides these are CTESIPHON, METAGENES, CLEETA, CALLIMACHUS, DÆDALUS, RHÆCUS of Samos, HIPPODAMUS, POLYCLETES, SATYRUS, METRODORUS, ALLIPIAS, CIRIAS, ISIDORUS, ANTHEMIUS, and many others whose names only are preserved by Virtruvius.

Among the principal architects of the modern Roman or Italian schools, and its branches, are METRODORUS, Persia, A. D. 320. Many buildings in India, whither he travelled: some at Constantinople. He is the first known Christian architect. ALIPIUS of Antioch, 350: By command of Julian the Apostate, he laid the foundation of a new temple at Jerusalem; but the work was interrupted by flames of fire, which issued from the earth. CIRIADES of Rome, 400: A church and a bridge. SENNAMAR of Arabia, 450: Sedir and Khaovarnack, two celebrated palaces in Arabia. ALOISIUS of Padua, 490: He assisted in the erection of the celebrated rotunda at Ravenna, the cupola of which is said to have been of one stone, thirty-eight feet in diameter, and fifteen feet thick. He also displayed his talents in the reparation of many ancient edifices under the direction of Cassiodorus. ST. GERMAIN of Paris, 500: The plan of the church of St. Germain, previously dedicated to St. Vincent, at Paris. A convent at Mans. He was bishop of Paris. St. AVITUS of Clermont, 500: The church of Madonne du Port. He was bishop of Clermont. ST. AGRICOLA of Chalons, 500: Cathedral of Chalons, with many other churches in that diocess; of which he was bishop. ETERIUS of Constantinople, 550: Part of the imperial palace at Constantinople, called Chalci. ANTHEMIUS of Tralles in Lydia, 550: The celebrated church of St. Sophia, at Constantinople, now the principal mosque of that city; and several other buildings there. His style was remarkable for grandeur and dignity. ISIDORUS of Miletus, 550: He assisted in the erection of the church of St. Sophia, at Constantinople. CHRYSES of Dara, in Persia, 550: He constructed the celebrated dykes along the Euripus, near Dara, to keep the river in its channel, and to prevent the water of the sea from entering the river. He excelled in hydraulic architecture. ISIDORUS of Byzantium, 600: The city of Zenobia in Syria was built by him and Johannes. His taste was not pure, and too affected. JOHANNES of Miletus, 600: (See Isidorus.) ROMUALDUS of France, 840: The cathedral of Rheims; the ear-

liest example of what is termed gothic architecture. TIETLAND of Switzerland, 900: The celebrated convent of Einseideln, in Switzerland. TIODA of Spain, 900: The palace of King Alphonso the Chaste, at Oviedo, now the episcopal palace. The Churches of St. Salvator, St. Michael, and St. Mary. BUSCHETTO of Dulichium, of Greek extraction, 1016: The celebrated cathedral, or duomo of Pisa; the earliest example of what is termed Lombard ecclesiastical architecture. It was built in 1016; is in plan a Latin cross, four hundred and fifteen feet long, and one hundred and forty-five feet wide. This architect died at Pisa, where there is a monument and inscription to his memory. PIETRO DI USTAMBER of Spain, 1020: The cathedral of Chartres. ALVARO GARRIA of Estella, in Navarre, 1070: RAIMOND of Montford, in France, 1139: The cathedral of Lugo. DIOTI SALVI of Italy, 1150: The celebrated Battisterio of Pisa, near the Campo Santo. His works were in the Lombard style, overloaded with minute ornaments. BUONO of Venice, 1150: The celebrated tower of St. Mark, at Venice, three hundred and thirty feet high, and forty feet square, in 1154: A design for enlarging the church of Santa Maria Maggiora, at Florence, the master walls of which are still in being. The vicaria, with the Castello del' Uovo, at Naples. The church of St. Andrew, at Pistoia La Casa della Città, with a campanile at Arezzo. SUGGER of St. Denis, 1150: He rebuilt the church and abbey of St. Denis, near Paris. He was distinguished by perfection in what is called the gothic style. PIETRO DI COZZO da Limena, of Italy, 1170: The celebrated great hall at Padua, which is two hundred and fifty-six feet long, eighty-six feet wide, and seventy two feet high, built in 1172, burnt 1420, and restored by two Venetian architects, Rizzo and Piccino; dismantled by a whirlwind in 1756; again restored by Ferracina, who traced a meridian line therein. WILHELM, or Guglielmo of Germany, 1170: The hanging tower of marble at Pisa, built in 1174, upon which Bonnano and Tomaso, sculptors of Pisa, were also engaged. This tower was originally built perpendicular; but the ground consisting of sea sand, sunk during the progress of the works in such a manner, that its centre differs with its periphery about 15 feet. ROBERT of Lusarche, in France, 1220: The cathedral of Amiens, continued by Thomas de Cormont, and finished by his son Renauld. ETIENNE DE BONNEVEIL of France, 1220: The church of the Trinity, at Upsal, in Sweden, after the model of Notre Dame, at Paris. JEAN D' ECHELLES of France, 1250: The portico at Notre Dame at Paris. PIERRE DE MONTEREAU of France, 1250: The holy chapel at Vincennes. The refectory, dormitory, chapter house, and chapel of Notre Dame, in the convent of St. Germain des Prez, near Paris. EUDE DE MONTREUIL of France, 1250: Church of the Hotel Dieu at Paris. The churches of St. Catherine du Val des Ecoliers, of St. Croiz de la Bretonnerie, of Blancs Manteaux, of the Mathurins, of the Cordeliers, and of the Carthusians at Paris. His style was dark and heavy. SAN GONSALVO of Portugal, 1250: Stone bridge at Amaranto. SAN LORENZO, of Portugal, 1250: Stone bridge at Tui. SAN PIETRO, of Portugal, 1250: Stone bridge, called Il Ponte de Cavez. LAPO, or Jacobus of Germany, 1250: Convent and church of St. Francesco. The church contains three stories, containing, in fact, three churches, finished in four years, 1218: Palazzo del Bargello, and the façade of the archbishop's palace, at Florence. NICOLA DA PISA of Pisa, 1250: Convent and church of the Dominicans at Bologna; church of St. Michile, some palaces, and the octagonal campanile of the Augustin's at Pisa; great church del Santo, at Padua; the church of Santa Maria at Orvietto; church de' Frati Minori, at Venice; abbey and church in the plains of Taliacozzo, in the kingdom of Naples, built in memory of the famous victory obtained there by Charles I. over Conrad; plans of the church of St. Giovanni, at Sienna; the church and convent della Santissima Trinita, at Florence; the church of which so delighted Michael Angiolo, that he was never satiated with its beauties, and used to call it "La sua dama;" and also for those of the Dominicans at Arezzo, which were built by Maglione his scholar; the repairs and alterations to the duomo at Volterra; the church and convent of the Dominicans at Viterbo; he intermixed the Gothic with the Lombard style; about twenty-eight years later commenced the building of the cathedral of Florence by two monks, Fra. Giovanni and Fra. Ristoro. FUCCIO of Italy, 1270: Church of St. Mary sul' Arno, at Florence. The gates against the river Volturno, at Capua; he finished the vicaria and castello dell' Uovo, at Naples, which were commenced by Buono; and was distinguished for his skill in fortification. FERRANTE MAGLIONE of Pisa, disciple of Nicola da Pisa, 1270: The cathedral and the church of S. Lorenzo at Naples; the Palazzo Vecchio in the same city, in conjunction with Giovanni Benin Casa; the church and convent of the Dominicans at

Arezzo. MASUCCIO of Naples, born in 1230, died in 1305. The church of Santa Maria della Nuovo at Naples; churches of St. Dominico Magg. and St. Giovanni Magg.; the archiepiscopal palace, and Palazzo colombrano in the same city. MARINO BOCCANERA of Genoa, 1280 to 1300: The mole, arsenal, and harbour of Genoa were designed and begun by him. ARNOLFO FIORENTINO of Florence, born in 1232, died in 1300: The church of St. Croce; the walls of the city, together with the towers; the Palazzo della Signoria, now il Palazzo Vecchio; the model and plan of the cathedral St. Maria del Fiore, to which Bruneleschi added the cupola; the abbey, and the Piazza San Micheli; the Piazza dei Priori at Florence. His fellow citizens were so well pleased with his works that they made him free of their city. PIETRO PEREZ of Spain, 1280: The cathedral of Toledo. ROBERT DE COVEY of France, 1280: He rebuilt the cathedral at Rheims. ERWIN VON STEINBACH of Germany, 1280: The celebrated minster of Strasburg was superintended by him for twenty-eight years. His style was the purest gothic. See the plates to Moller's Essay on the Origin and Progress of Gothic Architecture, Darmstadt, fo. 1819—22; and a translation, without the plates, London, 8vo. 1824. GIOVANNI DA PISA, son and scholar of Nicola da Pisa, 1220 to 1280: The celebrated Campo Santo, or public cemetery at Pisa, which contains fifty ships' freight of earth from Jerusalem, brought hither in 1228. Christina of Sweden called this cemetery "Non un cemeterio ma un museo;" the tribune of the Duomo in the same city; Castel Nuovo, and the church of Santa Maria della Nuovo at Naples; the façade of the cathedral of Siena; many other churches and palaces at Arezzo, and in other towns of Italy. He is remarkable as the first architect in the modern style of fortification. His churches and other buildings are grand and cheerful. ANDREA DA PISA of Pisa, born in 1270, died in 1345: Plan of the fortress della Scarperia at Mugello, at the foot of the Apennines; plan and model of the church of San Giovanni at Pistoia; the ducal Palazzo Gualtieri at Florence. He was distinguished in fortification. AGOSTINO, brother of Angelo of Pisa, called also da Siena, 1300: The north and west façades of the cathedral of Siena, as also the two gates; the church and convent of St. Francis; the Palazzo de' nove Magistrati; the grand fountain in the piazza opposite the Palazzo della Signoria; the hall of the council chamber, and the Palazzo Publico in the same city; the church di S. Maria in Piazza Manetti, likewise at Siena, was built by him and Angelo jointly. ANGELO, brother of Agostino of Pisa, called also da Siena, 1300. See AGOSTINO. GIACOMA LANFRANI, of Italy, 1330: Church of St. Francis at Imola; church of St. Antonio at Venice. JEAN RAUY of France, 1340: He finished the building of the church of Notre Dame at Paris. WILLIAM REDE of Chichester, England, 1350: The castle of Amberly, Sussex. WILLIAM WYKEHAM of Wykeham, in England, 1350: Plan of Windsor Castle; cathedral of Winchester. FILIPPO BRUNELESCHI of Florence, born in 1377, died in 1444: Cupola of the cathedral of Santa Maria del Fiore at Florence. In 1420 a council of artists was held at Florence to consider and advise on his scheme. In this council even English artists are said to have assisted. After a diversity of opinions Bruneleschi's project was approved and adopted. This cathedral is about four hundred feet long, and three hundred and eighty feet high to the top of the lantern. Palazzo Pitti, at the same place, begun and about half finished by him, and completed by Luca Fancelli; a great part of the church of San Spirito; the church degl' Angeli, designed and begun, but not completed for want of money; the monastery de' Camaldosi. He also built the fortress of Milan, and several works about the cathedral of that city; drained the country round Mantua; a model for the fortress of Pesaro; the old and new citadel at Pisa; some other works in the same city, at Trento, and other parts of Italy. He set the first example of the purer style in the architecture of Italy, and educated several pupils: the two most eminent were Luca Fancelli, before mentioned, and Leo Battista Alberti. MICHELOZZO MICHELOZZI of Florence, 1400: The Palazzo de Medicis, now dei Marchesi Riccardi, built instead of the great palace which was designed by Bruneleschi, for Cosimo di Medici, but not executed on account of the expense; the Palazzo Caffagiulo; the convent of the Dominicans; the Noviziato di Santa Croce; the chapel in the church dei Servi; the Palazzo della Villa Careggi; and the Palazzo Tornabuoni, now dei Marchesi Corsi; and several other palaces, churches, and convents at Florence. This architect was so great an admirer of Cosimo that he followed him in his exile to Venice; during which time he built the library in the monastery of the Black Benedictines at Cosimo's expense; the palace di Caffaggiuolo, by order of the same munificent patron of the arts, and the Palazzo della villa Careggi, both at Mugello; some buildings at Trento; a beautiful

fountain at Assisi, la cittadella vecchia at Perugia; the alterations to the palace presented to Cosimo by Francesco Sforza; and other great works in various parts of Italy. His style was distinguished for a purity little known in his day. GIULIANO of Majano, near Florence, born in 1377, died in 1447: The palazzo del Poggio Reale at Naples; a Corinthian triumphal gate at the Castel Nuovo; as also many of the fountains in the same city; the cortile S. Damaso, in the Vatican at Rome, whither he was invited by Paul II; the palace and church of St. Marco in the same city, in which he employed many of the ruins of the Colosseum; he also enlarged the church at Loreto, under the orders of Paul II.: the cupola, however, was completed by Benedetto his brother; or, according to others, by Giuliano Sangallo. He was an artist of distinguished merit, much esteemed by Alphonso, by whose orders he was buried with distinguished honours. ANDREA CICCIONE of Naples, died in 1455: The convent and church Monte Olivito; the palace of Bartolomeo da Capua, and several other palaces and convents at Naples. LEON BATTISTA ALBERTI of Florence, born in 1398: Church of St. Francis at Rimini, ornamented by the desire of Sigismondo Malatesta; church of St. Andrew at Mantua, for the Duke Lodovico Gonzaga; the cupola was designed and added by Giovara. The principal façade of Santa Maria Novella at Florence has by some been attributed to Alberti; but Gwilt thinks, from the circumstance of its being gothic, that it may with more propriety be assigned as the work of Bettini. The gate and Corinthian Loggie are however from the designs of Alberti, as also the Doric façade of the Palazzo Rucellai, and the choir and tribune of the church della Nunziate, all at Florence; where he died at an advanced age. He also repaired the Aqua Vergine and the fountain of Trevi at Rome, under Nicolas V; the palace for the Duke Federigo Feltre at Urbino, and a great number of other buildings in Italy. CHRISTOBOLO of Italy, 1450: A mosque at Constantinople, with eight schools and eight hospitals, on the site of the church of the Apostles, by command of Mahomet II. BACCIO PINTELLI of Florence, 1450: Church and convent of S. Maria del Popolo at Rome; the celebrated Capella Sistina in the Vatican; the hospital of S. Spirito in Sassia; the Ponte Sisto; designs for the church of S. Pietro, in Montorio; the church of S. Sisto, under the Pontificate and by the orders of Sixtus IV; the church of S. Agostino, and the church of S. Pietro, in Vincula at Rome; the palace for the Duke Federigo Feltre at Urbino is by some attributed to this architect, who rebuilt the church and convent of St. Francis at Assisi, and built the palace for the Cardinal del Rovere at Borgo Vecchio. He first set the example of grandeur in the architecture of chapels. BARTOLOMEO BRAMANTINO of Italy, 1450: The church San Satiro at Milan, and many other buildings in various cities of Italy. GIOVANNI DEL POZZO of Spain, 1450: the Dominican convent, and a great bridge over the river Huccar, near Cuenza. FRANCESCO DI GIORGIO of Siena, born in 1423, died 1470: The ducal palace at Urbino. RIDOLFO FIORAVANTI of Bologna, 1450: he restored the hanging tower of the church of S. Biagio at Cento, to its perpendicular position, and built many churches at Moscow. BRAMANTE LAZZARI, better known by the name of Bramante d' Urbino, of Castel Durante, near Urbino, born 1444, died 1514: He first designed and commenced the building of St. Peter's at Rome in 1513; a small model was executed after the same design for an isolated church without the walls of Todi; he executed many works in the Vatican, among which are the library and the Belvidere Court, besides a magnificent design for alterations thereto, under Julius II, of whom he was a great favourite; the Rotunda in the convent of S. Pietro Montorio; the palaces of S. Giocomo Scoscia Cavalli ora de' Conti Geraud; del Duca de Sora, della Cancellaria, del Nuovo dell' Imperiale; the churches of S. S. Euloy de' Orfano, Lorenzo and Damaso; the cloisters of the monastery della Pace, &c. at Rome; the Strada Julia in that city; the ducal palace at Urbino; a detached circular temple near Todi; the Palazzo Publico at Breschia, and designed many plans for other edifices, among which is the church dell' Umiltà at Pistoria, built by his pupil Vitoni. He manifested a decided predilection for the ancient Greek style, and was Raffaelle's master in architecture. VENTURA VITONI of Pistoja, 1479: the church dell Umiltà, at Pistoja. FRANCESCO GIAMBERTI of Florence, 1470: He designed numerous plans for buildings at Florence and Rome, but was chiefly remarkable for a work composed by him, containing many drawings of ancient monuments, about Rome and in Greece, upon parchment, which is preserved in the Barberini library at Rome, and has never been published. GUILIANO DI SAN GALLO, son of Giamberti of Florence, born 1443, died 1517: the cloister of the Carmelites di Santa Maddelena de Pazzi at Florence; a cloister for the Frati Eremitani di St. Agos-

tino. From the circumstance of its being built out by the gate San Gallo the architect obtained his name. La Gran fabbrica del Poggio Imperiale, a fortress near the Porto a Prato, and other works at Florence; a magnificent palace at Poggio Cajana for Lorenzo di Medici; the cupola of the church della Madonna at Loreto being in a dangerous state, repaired and strengthened; restoration of the roof and decorations of the ceiling of the church of S. Maria Maggiore; restoration of the church dell' Anima; the Palazzo Rovere, near S. Pietro, in Vincula at Rome; the Palazzo Rovere at Savona; an unfinished palace at Milan; the fortress and gate of S. Marco, of the Doric order, and many palaces at Pisa, and the fortifications at Ostia. He was eminent for his skill both in architecture and in the modern style of fortification. He was much mortified by the employment of Bramante instead of himself, for the rebuilding of St. Peter at Rome. The conduct of the works was afterwards offered to him by Leo X.; but he then declined the acceptance on account of old age. LEONARDO DA VINCI of Castello da Vinci, near Florence, born 1443, died 1518: The aquæduct of the Adda (see AQUÆDUCT), at Milan, under the orders of Ludovico Sforza, by which the waters of the Adda were brought to Milan, and the navigable canal of Mortesani rendered navigable up to the valleys of Chiavenna and Valtellina, being a distance of two hundred miles; various machines, plans, and works on architecture. SIMONE POLLAJUOLO of Florence, born 1454, died 1509: Façade of the Palazzo Strozzi at Florence; the church of St. Francis at S. Miniato, near Florence, called by Michael Angiolo, La Bella Villanella; convent of the Padri Serviti; the sacristy of Santo Spirito, and the council chamber at Florence. His style displayed great taste. ANDREA CONTUCCI di Monte Sansovino, born 1460, died 1529: The beautiful chapel del Sagramento in the church di Santo Spirito at Florence; the palace della Canonica at Loretto, under the orders of Leo X.; a cloister for the monks of S. Agostino, and a little chapel without the walls of Monte Sansovino; some works at Venice, and many buildings in Portugal. BACCIO D' AGNOLO of Florence, born 1460, died 1543: The beautiful bell tower or campanile of San Spirito; the lantern above the cupola of Sta Maria del Fiore, the great altar and choir of which was built by his son Giuliano; the palace for Giovanni Bartollini in the Piazza di Santa Trinità; which was the first modern palace wherein dressings to the windows and doors were used, they excited much ridicule in Florence at the time; the Palazzo Salviato at Rome. NOVELLO DA SAN LUCANO of Naples, 1500: The palace of Prince Robert Sanseverino, Duke of Salerno at Naples; and the restoration of the church of San Domenico Maggiore, which was built by Lucano. RAFFAELLO D' URBINO of Urbino, born 1488, died 1520: Continuation of the cathedral of St. Peter at Rome, after the death of Bramante, his master in architecture; subordinate buildings of the Farnesina; church of Sta Maria in Navicella, repaired and altered; stables of Agostino near the Palazzo Farnese; the Palazzo Caffarelli, now Stoppani; the gardens of the Vatican; all at Rome; the Façade of the church of S. Lorenzo, and of the Palazzo Uggoccioni, now Pandolfini, at Florence; several other buildings in a tasteful style, in various parts of Italy. GABRIELLO D' AGNOLO of Naples, 1500: Church of S. Giuseppe, church of S. Maria Egiziaca; palace for Ferdinando Orsini, Duke of Gravina, at Naples. GIAN FRANCESCO NORMANDO of Florence, 1500: Church of S. Severino, Palazzo Filomarini, Palazzo Cantalupo in the Posilipo at Naples; several buildings in Spain. ANTONIO FIORENTINO of Florence, died 1570: Church of Santa Caterina a Formello at Naples, with a cupola, which is said to have been the first erected upon a large scale in that city. BALDASSARE PERUZZI of Volterra, born 1481, died 1536: Plan and model of the cathedral or duomo at Carpi; two designs for the façade of San Petronio, and the gate of San Michele in Bosco at Bologna; fortifications at Siena; the little palace built for Agostino Chigi, now called the Farnesina in the Langara; the Palazzo Massimi, near the church of San Pantaleo; the Villa di Papa Giulio III; the cortile of the palace de Duchi Altemps; the casino at the Palazzo Chigi; the tomb of Pope Hadrian IV. in the church dell' Anima; the Palazzo Spinosa, now the hospital degli Eretici convertiti, at Rome; he assisted in the erection of St. Peter's in that city, and was distinguished for a tasteful style; he died in Rome, and was interred by the side of Raffaelle in the Pantheon. FRA. GIOCONDO of Verona, born 1435: Many bridges, especially that of Nôtre Dame at Paris; the public hall and the Ponte della Pietra at Verona; the fortifications at Treviso; the cleansing of the Lagunes, and a design for the Ponte Rialto at Venice; he was engaged in the erection of St. Peter's at Rome, after the death of Bramante, in conjunction with Raffaelle

and San Gallo; they raised and strengthened the arches and contreforts on which the structure is raised. PIETRO LOMBARDO of Venice, 1500: The tomb of Dante, the poet, in the church of St. Francis at Ravenna, by command of Cardinal Bembo; church of S. S. Paolo, e Giovanni, and monastery adjoining the church of Santa Maria Mater Domini, and clock-tower in the square of St. Mark; the German warehouse on the Rialto, and the school della Misericordia at Venice; the cloister of Sta Giustina at Padua. MARTINO LOMBARDO of Venice, 1500: The school or Confraternità of San Marco, and perhaps the church of S. Zaccaria at Venice. BARTOLEMEO BUONO of Bergamo, died 1529: Church of S. Rocco; some parts of the Campanile di San Marco, and the Procurazie Vecchie at Venice. ANTONIO SAN GALLO of Mugello, near Florence, died 1534: The churches of the Madonna di Loretto near Trajan's column, of Sta Maria di Monserrato, of S. Giovanni de Fiorentini; the Palazzetto de' Conte Palma; the Palazzi di Santo Buono for himself, now that of the Marchesi Sacchetti; Farnese begun by Paul III. when a cardinal; the fortifications of Cività Vecchia of Civita Castellana, of Parma, Ancona, and many other strong places in Italy; the mole of Adrian altered to its present form of the castle of St. Angelo; the triumphal arch in the square of St. Mark at Venice; a temple to our lady at Monte Pulciano. He commenced the building of the Palazzo Farnese at Rome, which was finished by Michel Angiolo; built the Capella Paolina del Vaticano, and assisted in the works at St. Peter's till 1546; he made a large model for finishing this fabric, which is still preserved in the apartments di Belvedere, behind the great niche; he displayed great perfection in all the parts of the styles adopted in modern architecture, and combined grandeur with good taste and solidity. SANTE LOMBARDO of Venice, born 1504, died 1560; the Palazzo Vendramini; the staircase and façade of the school of S. Rocco, and the palaces Trevisani and Gradenigo at Venice. GUGLIELOMO BERGAMASCO of Bergamo, 1520: The Capella Emiliana of the Camaldulenses at Murano, an island of the Lagunes; the Palazzo di Camerlinghi near the Ponte Rialto at Venice; Palace at Portogruato in the Friuli; the gate di Santo Tommaso at Treviso; the admirable gate called il Portello at Padua. GIOVANNI MARIA FALCONETTO, a native of Verona, born 1458, died 1534: The church della Madonna delle Grazie, for the Dominicans, at Padua; a palace in the Castel d' Usopo in the Friul; the palace for Luigi Cornaro near the Santo; the Doric gate to the Palazzo Capitano; the gates of S. S. Giovanni and Savonarola; a music hall much admired by Serlio, who called it "La Rotonda di Padoua." It is said that this building gave Palladio the hint for his Villa Capra. GIROLAMO GENGA of Urbino, born 1476, died 1558: A palace built for the Duke of Urbino, sul monte dell' Imperiale; the court of the palace restored; and the church of S. Giovanni Battista, built at Pesaro; façade of the cathedral and the Bishop's palace at Mantua; the convent de' Zoccolanti at Monte Baroccio: his son Bartolemeo is also the architect of several esteemed works at Mondavio Pesau and other parts of Italy. MICHELO SAN MICHELI of Verona, born 1484, died 1559: Cathedral of Monte Fiascone; the celebrated church of St. Dominichino at Orvietto; a great number of fortresses in the Venetian territory, in Corfu, Lombardy, and the ecclesiastical state; those at Piacenza and Parma were in conjunction with Sangallo, and at Legnano, Orri Nuovi, and Castello by himself; the palaces di Canossa della Gran Guardia on the Bra; Pelligrini de' Versi; the Prefecturate and the façade of the Palazzo Bevelaqua at Verona; the chapel Guareschi in the church S. Bernardino; design for the campanile of the duomo; the churches of Sta Maria in Organo de Monaci, di Monti Olivetti, di San Giorgio, and della Madama di Campagna in the same city; the gates Nuova, del Pallio, di S. Zenono, del Palazzo Pretorio, and del Palazzo Prefettizio at Verona, of which that del Pallio is the most celebrated; the fortifications of the same city are also by him, being the first wherein triangular bastions were introduced, the first bastion, that of della Madellina was erected in 1527, and distinguished for his improvements in fortification. MICHEL ANGIOLO DI BUONAROTTI of Florence, born 1474, died 1564: The library of the Medici, generally called the Laurentian Library, at Florence; model for the façade of the church of San Lorenzo, preserved in the Medicean library; the second sacristy of Lorenzo, commonly called the Capella dei Depositi, at the same place; the church San Giovanni, which he boasted, if finished, would surpass all the works of the ancients; it was not finished during his life, and the model is now lost; fortifications at Florence and at Monte San Miniato; monument of Julius II. in the church of S. Pietro in Vinculis at Rome; plan of the Campidoglio; Palace of the Conservatori;

the building in the centre and the flight of steps in the Campidoglio or Capitol at Rome; continuation of the palace Farnese and several gates at Rome, among which the Porta Nomentana or Pia deserves particular mention; the steeple of S. Michaele at Ostia; the Carthusian church of Santa Maria degli Angeli; the gate to the vineyard del Patriarca Grimani; the tower of S. Lorenzo at Ardea; the church of S. Maria in the Certosa at Rome; many plans of churches, chapels, and palaces; among others, that of the Capella Strozzi at Florence, and the College Sapienza at Rome, over the gate of which he inscribed "INITIUM SAPIENTIÆ TIMOR DOMINI;" after the death of Sangallo, he was engaged in prosecuting the works of St. Peter's at Rome, especially those parts which support the cupola; a set of his designs are still preserved in the Vatican; his chief merits were grandeur, boldness, beauty, and solidity. MAESTRO FILIPPO of Spain, 1520: Restoration of the celebrated cathedral of Seville. GIOVANNI DI OLOIZAGA of Biscay, 1520: Cathedral of Huesca in Arragon; he blended the modern Greek style with the Gothic, in the manner called Araba-tedescho (see this word). PIETRO DI GAMIEL of Spain, 1520: Convent of S. Engracia at Saragossa; college of Alcala in the Greco-Gothic style. GIOVANNI ALONZO of Spain, 1520: The celebrated sanctuary of Guadaloupe. FRA GIOVANNI D' ESCOBEDO of Spain, 1520: The grand aquæduct of Segovia, constructed by order of Queen Isabella, the first celebrated aquæduct of modern times. (See AQUÆDUCT.) GIOVANNI CAMPERO of Spain, 1520: The church and convent of St. Francis at Fordelaguna, erected by command of Cardinal Ximenes: its style is heavy and gloomy. MARCO DI PINO of Sienna, 1530: Church della Trinità di Palazzo modernised, and the church and convent of Gesu Vecchio at Naples, built. ANDREA BRIOSO of Padua, 1530: Beautiful church of S. Giustina at Padua, in conjunction with Alessandro Lepano, a Venetian. ALESSANDRO BASSANO of Bassano, 1530: The Loggia and counsel-house in the Piazza di Signori at Padua, erroneously attributed to Sansovino, finished in 1526. FERDINANDO MANLIO of Naples, 1530: Church and hospital della Nunziata; the Strada di Porta Nolana and di Monte Olivetto, with other streets and palaces at Naples; and a bridge at Capua. GIULIO PIPPI, commonly called GIULIO ROMANO, of Rome, born 1492, died 1546: The villa Madama, with a beautiful little palace, now destroyed; the Palazzo Lante at S. Pietro; church della Modona del Orto; Palazzo Ciccia porci alla strada di Banchi; Palazzo Cenci sulla Piazza S. Eustachio near the Palazzo Lante; and other buildings in Rome; the celebrated Palazzo del T. at Mantua; the palace at Marmiruolo, five miles out of Mantua; the modernising and enlarging of the ducal palace; the duomo and some triumphal arches for the entrance of Charles V., besides many other buildings in that city; façade of S. Petronio at Bologna, and some works at Vicenza; his style was highly cheerful and pleasing. JACOPO TATTI, surnamed SANSOVINO, of Florence, born 1479, died 1570: Church of S. Marcello, begun, and that of S. Giovanni de' Fiorentini built to rival the churches then building at Rome, by the German, Spanish, and French nations. Raffaelle, Antonio San Gallo, and Baldassare Peruzzi gave in designs for it. It was founded too near the banks of the Tiber; and its failure in consequence thereof brought the architect into such disgrace that he retired to Florence, where he soon after fell into a similar error. He also built the Loggia on the Via Flaminia, just out of the Porto del Popolo, for Marco Coscia, and the Palazzo Gaddi, now de' Nicolini at Rome; church of S. Francesco della Vigna, finished by Palladio, who much admired the works of this master, particularly the library of S. Mark; the Palazzo Cornari, sul canal Grande at San Maurizio; the mint, and many other public buildings at Venice; beautiful church of San Fantino; church of San Geminiano, with many other churches in the same city; he displayed a remarkably pure taste in the Lombard style. GIOVANNI MERLIANO DA NOLA, 1530: The Strada di Toledo; the church of S. Giorgio de' Genovesi; the church of S. Giacomo degli Spagnuoli; plan of the palace del Principe di San Severo, and the palace of the Duca della Torre; the Castel Capuano altered to a court for law proceedings; a fountain at the extremity of the mole, and some triumphal arches for the entry of Charles V. on his return from Tunis, at Naples. GIOVANNI GIL DE HONTANON of Spain, 1530: Plan of the cathedral of Salamanca. RODRIGO GILDE HONTANON of Spain, 1540: He superintended the erection of the cathedral of Salamanca; the cathedral of Segovia. PIETRO DE URIA of Spain, 1540: The celebrated bridge of Almaraz over the Tagus. ALONZO DE COBARRUBIAS of Spain, 1540: Repair of the church of Toledo, erected in 587, during the reign of King Reccaredo; façade of the Alcaziar in the same city; convent and church of S. Mi-

chael at Valenza. DIEGO SILOE of Toledo, 1540: The cathedral and Alcaziar at Grenada; the church and convent of St. Jerome in the same city. DAMIANO FORMENT of Valenza, 1550: Façade of the church of S. Engracia at Saragossa. MARTINO DE GAINZA of Spain, 1550: The magnificent chapel royal at Seville. ALONSO BERRUGUETE of Parades, near Valladolid, 1550: Plan of the former royal palace at Madrid; gate of S. Martino at Toledo; Palace of Alcala in that city; he assisted in the erection of the cathedral of Cuenza. PIETRO DE VALDEVIRA of Valdevira, 1550: The remarkably beautiful chapel of S. Salvador at Ubeda, and likewise a palace in the same place; the hospital and chapel of S. Iago at Baeza. PIETRO EZGUERRA of Ojebar, near Perayas, 1550: Cathedral of Plasencia; church of S. Matteo de Caceres; church of Malpartida. FERDINANDO RUIZ of Cordova, 1550: He heightened the great steeple of the cathedral of Seville, called the Torre della Giralda. MACHUCA of Spain, 1550: Royal palace of Grenada. DOMENICO TESTOCOPOLI of Greece, 1560: College of the Donna Maria D'Arragona at Madrid; church and convent of the Dominican nuns, and also the Ayuntamiento at Toledo; church and convent of the Bernardine nuns at Silos; style heavy and gloomy. GARZIA D' EMERE of Spain, 1560: Parochial church of Valeria near Cuenza. BARTOLEMO DI BUSTAMENTE of Spain, 1560: Hospital of St. John the Baptist near Toledo. GIOVAN BATTISTA DI TOLEDO of Toledo, 1560: The celebrated palace of the Escurial was built after his designs; he assisted in planning the street of Toledo at Naples, the church of S. Jago, belonging to the Spaniards; and a palace at Posilipo in the same city; the Escurial was the first palace upon an extensive scale in Europe. GIOVANNI D'HERRERA of Movellar in Austria, 1570: He continued the Escurial after the death of his master Giovan Battista; plan of the church of S. Jago near Cuenza; bridge of Segovia at Madrid; the palace of Aranjuez.

Among other celebrated foreign architects not before enumerated, are ALESSANDRO ALGARDI, born 1602, died 1654, who was principally employed at Rome; ARNOLFO DI LAPO at Aresso, Assisi, and Florence; Bartolemeo Pintelli; Bartolemeo Ammanati, born 1511, died 1586, who executed the Palazzo Petti and the beautiful bridge of Santissima Trinità. Francesco Borromini, the author of numerous absurdities in Rome and Florence. Cavalier Carlo Fontana, whose excellent works at Rome, Frescati, and Monte Fiascene have obtained him an excellent reputation, one of the last architects of St. Peter's at Rome. Carlo Lombardo at Rome; the Cavalier Cosimo da Bergamo; Carlo Maderno, who altered Michel Angiolo's design of St. Peter's at Rome from a Greek to a Latin cross. Domenico Castelli; Filippo Gagliardi; the Cavalier Francesco Fontana; Giacomo della Porta; Giacomo Barozzi da Vignola, a celebrated writer as well as a good architect, whose works are to be found at Bologna, Piacenza, Assisi, Rome, Perugia, Villibo, Caprarola, and other parts of Italy. The Cavalier Lorenzo Bernini, who designed the celebrated piazza, colonnade, and staircase at St. Peter's, and many other fine works at Rome, Parma, Ariccia, Castel Gandolfo, Civita Vecchia, &c. Martino and Onorio Lunghi; Pietro da Cortona; Vincenzo Ammanati; Vincenzo Scamozzi, of great celebrity and the supposed inventor of the angular Ionic capital; he was one of the masters of the art. Sebastian Serlio; Pietro Cataneo; Andrea Palladio, to whose works justice will be attempted in the article *Architecture*, and *Schools of Architecture*. Domenicho Zampieri, &c. &c. &c.

Of the more eminent English architects are William of Wickham, the architect of Windsor Castle; Aldred, Bishop of Worcester; Sir Reginald Bray; Robert Keyes; Rodolph Simmons; Robert Tully, Bishop of St. David's; Henry Fitzallan, Earl of Arundel; Archbishop Chicheley; Theodore Havens, who erected Caius College, Cambridge, a fair specimen of the architecture of the day, pedantic, eccentric, and affected; John Shute, a painter and architect, who flourished in the reign of Queen Elizabeth; Waynefleete; John Thynne, who built Somerset House in 1567, in a mixed style of Italian and Gothic; Robert Adams, superintendent of royal buildings to Queen Elizabeth; Inigo Jones, the architect of Whitehall; Sir Henry Wotton; Sir Christopher Wren, the architect of St. Paul's and the new city of London after the fire; Nicholas Hawksmoor, his pupil, who designed the church of St. George, Bloomsbury, and St. Anne, Limehouse; Robert Hook, the associate of Wren, and architect to Bethlem Hospital, Ashe's Almshouses, and the British Museum; Sir John Vanbrugh, the architect of Blenheim; John Benson, the successor of Wren; William Kent, painter and architect; John Thorpe; Colin Campbell, author of the Vitruvius Britannicus, and architect of Wanstead; Rev. H. Aldrich; John Evelyn; James Gibbs, architect of Radcliffe library, Oxford, the New Church in the Strand, and

St. Martin's in the Fields; John Brettingham, who designed Holkham in Norfolk; the Earl of Burlington, Chiswick House, and Burlington House, Piccadilly; George Dance, the elder, Shoreditch Church and the city Mansion House; John Gwynn; James Wood of Bath; John Gandon, many fine buildings in Dublin, particularly the Custom House; James Paine; William Pain; Robert Adam and James Adam, who designed the Adelphi Terrace, &c.; Sir William Chambers, Somerset House; John Carr of York; James Wyatt, celebrated for his villas and pure taste; Robert Milne, Blackfriars' Bridge, &c. &c. &c.

Among the leading French architects, not before enumerated, are Jaques le Mercier, Jaques de Brosse, François Mansart, Philibert de Lorme, Pierre Lescott, Louis le Foix, Jaques Audrouet du Cerceau, Clement Metazau, Pierre le Muet, Louis le Veau, François Blondel, author of *Le Cours d'Architecture*, Claude Perrault Antoine le Pautre, Jules Hardouin Mansart, Alexandre Jean Baptiste le Blond, Jean Aubert, Robert de la Cotte, Guillott Aubrey, Gilles Maria Oppenord, Jaques François Blondel, author of *L'Architecture François;* Jaques Germain Soufflet, Jean Christian Gair d'Isle, Edm. Bouchardon, Jean Nicholas Servandoni, De Wailly, &c.

ARCHITECTURE. [αρχιτεκτονία, Gr. *architectura*, Lat.] The art or science of devising or drawing designs for buildings. The name of this branch of the fine arts is derived from αρχος chief, and τεκτονια, and is the art of building according to rules and proportions. Among all the arts, the progeny of pleasure and necessity which men have invented to alleviate the pains of life, and to transmit their names to posterity, a very high and distinguished situation must be assigned to architecture, whether for its antiquity, utility, or beauty. It is both a fine art and a science, and will be considered as such in this Dictionary, referring to distinct treatises for details of its mechanical and scientific parts of building and construction. The distinguishing characteristics of a good style are *order, convenience of interior distribution, beauty of form, regularity, and a good taste in the invention, selection, or application of ornaments.* Architecture is again divisible into three branches: *civil, military, and naval;* the former of which only will be treated of in this work. The style of civil architecture differs among different people, and among the same people of a different era. Among the people who have given names to styles in architecture are the *Egyptian, Babylonian, Persian, Indian, Phœnician, Hebraick or Jewish, Greek, Roman, Etruscan, Moorish, Arabian, Saxon, English, Gothic, Chinese, Sarracenic, Turkish.* And among the characteristics resulting from different eræ are the best ages of the antique, of the lower empire, and modern architecture. *See those different articles.*

Architecture is both a science and an art, has been cultivated in either way with great but doubtful success; the aimer at mere science often degenerating into a skilful artizan, and the boaster of picturesque skill into a pictorial theorist.

Without science architecture is an effeminate and useless pastime; and without the higher feelings of art a mere constructor of huts and cabins.

The scientific part of the art embraces and requires geometry, arithmetic, and every branch of the mathematics, mechanics, chemistry, mineralogy, and practical philosophy in general; which are to be applied with judgment to composition, construction, design, and execution. See ARCHITECT.

The artistlike part of architecture soars to the sublimest heaven of human invention. To the skill of the practical mathematician, mechanic, chymist, philosopher must be added the genius and feelings of the artist, to go towards the composition of a Palladio or a Wren.

Architecture, as an art, stands entirely alone, and distinctive from every other art, and is essentially the most original of them all. It is not imitative of originality like painting and sculpture, nor imitative of imitations like engraving; but if it resembles either in its mechanical part, it is in its theoretical resemblance to music. Architecture is fundamentally original, and shows the power of man's invention more than any art, and equally with any science. It calls in the aid of all the other arts, uses and rejects them by turns, and has been in every age the fosterer, protector, and promulgator of them all.

Architecture will therefore be considered both as an art and as a science in this work; which is addressed more immediately to the amateur and student than to the professor; and also to the inquiring cognoscenti and persons of taste, whose prospects or situations in life may render them patrons of the arts.

Architecture, being the first and earliest of the arts, embraces of necessity in itself a general knowledge of the critical or philosophical part of fine art in general, which, thus forming the taste on the purest models, is best fitted to enlarge the mind,

and prepare it for the reception of the laws and governing principles of the whole circle of the fine arts. It is an art which has "undoubtedly a dignity that no other art possesses, whether we consider it in its rudest state, occupied in raising a hut, or as practised in a cultivated nation, in the erection of a magnificent and ornamented temple."

A recent critic * beautifully says, that "nothing, certainly, can be more destructive to the hopes of an enlightened age, of fame among remote posterity, than the decay of an art, whose monuments are so lasting, and whose triumphs are so sure of continuance. Its venerable relics convey to us all we know of mighty nations long sunk into oblivion. Among piles which seem only to have partaken of the decay, and shared in the revolutions of nature, we feel transported, through long vistas of the short-lived generations of man, into the glories of the earliest nations of the world; we catch the mysterious spirit of patriarchal times, and image to ourselves, among these romantic solitudes, shepherd kings propounding their pure ordinances, simple tribes adoring the God of heaven, and untutored bards catching inspiration, in all its wildness, from the skies. We must leave such memorials of our glory behind us, as can be shaken only with the pyramids of Egypt, and the pillars of the universe." But what a contrast do the frail memorials of our times present to those immortal structures? and how is the art patronized now in comparison with those of our Charleses and Annes, which produced a Jones and a Wren, a Whitehall, a St. Paul's, and the solid churches of London after the fire.

"All who feel interested by the substantial progress of the fine arts, all who have feelings to admire the sacred solemnity, and the awful grandeur of those venerable piles, which the genius of Egypt, of Greece, of Rome, and of the middle ages, have left us, must be deeply interested by a discussion of the means by which that spirit may be revived, which raised these works of unfading enchantment, and which now seems slumbering beneath them." The season is most apt for a proper awakening; and we may indulge the hope that both our patrons and our architects may exert themselves with effect, to give dignity and stability to our national structures.

Architecture, considered as the art of building or construction, has three principal characters or primary divisions; namely, civil, military, and naval. The former, civil architecture, is the subject of the present article, and may be subdivided into three principal classes, or orders, as Monumental, Sacred, and Domestic.

Monumental Architecture, may be almost called the primitive branch of the art, for the rude stone erected in the simplest manner is a primitive monument.

In making a sketch of the history of architecture among the most ancient nations of the world, we find them almost invariably alike. The primitive town, or incipient city, was a number of low straggling huts, scattered about irregularly, according to the caprice of each proprietor, built with turf and rude stones, and thatched with straw or reeds, without any light but what they received by a door, so low that it could not be entered upright. The suburban architecture of the best towns in our unhappy sister country, Ireland, is a type of the origin of the art in the most ancient times.

Monumental architecture in its most ancient practice is scarcely separated from sacred; the monumental stone became an altar, and it is easy to conceive the rapid progress from this rude and simple place of adoration to the deity, to the more solemn temple. First we find the single monumental stone, reared on end, commemorative of some event, or testimonial of a treaty or boundary of property; used also as an altar of sacrifice or offering to the deity. This becomes surrounded by a pavement to prevent the earth from being sodden by the blood of the animals, and the moisture from the wet offerings trodden about by the feet of the primæval priests. The next step is to surround the sacred precinct with a row of rude upright stones, such as are seen at the present day in various parts of Ireland, which being covered over to protect the sacrifices, priests, and offerings, from the sun and rain, becomes a primæval temple with its roof, its cell, and its altar.

Such examples of monumental architecture have been found in all countries, have been consecrated to every religious creed, and are used to commemorate all sorts of actions, and to this day, in Ireland, the memory of a murder is always preserved by a rude heap of stones, every passer by contributing one. These monuments, such as altar stones, cromlechs, druidical circles, cairns, &c. bear the genuine character of simplicity, which infant societies and primitive religion impress at their origin on every thing connected with them. An able French Antiquary, M. Mazois, says, "A few stones, either naturally rising

* In Valpy's new Review.

above the soil, or placed without art in solitary spots, in the depth of forests, or on the summits of hills, were the first altars." Such are common in every part of our island, except where the demon innovation has swept them away. These primitive monuments soon became sanctified by the veneration of the people, and were received as emblems of the divinity. Such rustic monuments are found in every country in the world. The Arabs and the other nations of the East represented their gods by rough unhewn stones. It was even considered as sacrilegious by the Persians to give them the human form.

The Greeks themselves, who were so well acquainted with the art of embellishing every thing, originally represented their divinities under the form of simple stones. In the time of Pausanias, there were still to be seen, near Pheræ, thirty blocks of stone, consecrated to the thirty gods who were the earliest objects of Grecian adoration. Even Love and the Graces had at first no other images. In the time of Titus, Venus was still at Paphos, but a simple pyramidal stone.

Thus Greece, the country of the fine arts, presents us even in the epoch of her splendour with a number of these primitive monuments. We find that they were equally venerated by almost every other people. The Romans, in the time of Numa, entertained the same notions as the Persians, with regard to the manner of representing the deity. It was by them also deemed an impiety to impart to their gods a mortal shape; simple boundary stones were their images, and the name of Jupiter Terminus is a proof of the existence of that ancient usage. Egypt was formerly covered with those sacred stones, the original type of which is still manifest in the Pyramids; those haughty and too silent depositories of Egyptian mythology are only (so to speak) the ennobled descendants of primitive monuments. In short, those symbolical stones are to be seen in the heart of Asia, as shall be hereafter shown. Kempfer declares that at Japan they are even yet the objects of the veneration of the multitude.

Among the most ancient people, whose history has reached our times, are those inhabitants of the globe who lived before the flood, and whose deeds and occupations are recorded in the books of Moses. The history of architecture, considered philosophically, and as connected with the other arts of design, with science, and with legislature, is a history of the human mind. It bears so strong an impression of the character of the people, by whom it has been cultivated, that an attentive examination of its origin and progress is the most effectual way to discover the genius, the manners, and the mental characteristics of the various nations of the world. "Art," says Wieland, "is the half of our nature; and without art, man is the most miserable of animals."

Among the Antediluvians, architecture could not have made much progress as a fine art. The principal objects of these ancient heroes, were the chase, and other modes of providing food and clothing without the labour of cultivating the soil. Sanconiatho says (Apud. Euseb. præp. Evang. l. i. c. 9. p. 35.) that "fishing was one of the earliest inventions which the ancients attributed to their heroes." The Bible and Homer are full of the manners of our earliest ancestors. Fishing, hunting, the care of their flocks, and in later times, agriculture were the employments of their monarchs and heroes—their shepherd kings. Cookery, washing, making garments, and other domestic business were those of their women of rank, their princesses, and their queens.

The history of architecture before the flood, although it forms a large portion in the history of the art by a French author (Millin), furnishes but few authentic facts. The great historian and legislator of the Jews, Moses, has only related those leading events which were necessary to his history, and omitted those details which are only requisite for the gratification of curiosity.

Our great philosopher, Sir William Jones, in discoursing of this great event, the deluge, says, "the sketch of antediluvian history, as given by most ancient historians of the race of Adam, in which we find many dark passages, is followed by the narrative of a deluge which destroyed the whole race of man except four pairs, an historical fact admitted as true by every nation to whose literature we have access, and particularly by the ancient Hindûs, who have allotted a whole *purana* to the detail of that event, which they relate as usual in symbols or allegories. I concur most heartily," says this learned philosopher, "with those who insist, that in proportion as any fact mentioned in history seems repugnant to the course of nature, or, in one word, *miraculous*, the stronger evidence is required to induce a rational belief of it; but we hear that cities have been overwhelmed by eruptions from burning mountains, territories laid waste by hurricanes, and whole islands depopulated by earthquakes; if then we look at the firmament, sprinkled with innumerable stars,

we conclude by a fair analogy, that every star is a sun, attracting like ours, a system of inhabited planets; and if our ardent fancy, soaring hand in hand with sound reason, waft us beyond our visible diurnal sphere into regions of immensity, disclosing other celestial expanses, and other systems of suns, and worlds on all sides without number or end, we cannot but consider the submersion of our little spheroid, as an infinitely less event in respect of the immeasurable universe, than the destruction of a city, or an isle, in respect of this habitable globe. Let a general flood, however, be supposed improbable, in proportion to the magnitude of so ruinous an event, yet the concurrent evidences of it are completely adequate to the supposed improbability."

The state of mankind immediately after this general deluge, is shown in the Mosaic history. The families of Noah which emerged from the ark, after paying their grateful adoration to the Deity, who had preserved them in order to perpetuate their race, erected an altar of unhewn stones, and offered sacrifice thereon. This is one of the most ancient examples of postdiluvian monumental architecture on record.

The descendants of Noah remained no longer united in one society than was necessary for their increase and security. As soon as they were sufficiently numerous, they dispersed themselves into the different regions of the earth, about a century and a half after the flood. It does not, however, appear that it was their intention at first to separate permanently, though they were often obliged to separate in search of subsistence. "With this view they formed the design of building a city, and of raising a tower of a great height in the centre of it, as a signal, and as a point of union." It was for this purpose that the French antiquary De Goguet, in his *Origine des Loix*, attributes the erection of that vast structure called the tower of Babel, while the best translators of the Hebrew Bible, render the fourth verse of the eleventh chapter of Genesis, "Let us build us a city, and a tower, whose top may reach unto heaven; and let us *make us a name*, lest we be scattered abroad;" giving the desire of perpetuating their fame by an indestructible monument, as their motive for this undertaking.

We learn the simple manners and customs of the ancient Israelites, and the nations in their immediate vicinity, from their ancient writers. And Homer, in describing the manners of the Cyclops, gives a corroborating idea of the uncultivated state of many of the ancient nations. "The Cyclops," says the poet*, "know no laws; each governs his family, and rules over his wife and children. They trouble not themselves with the affairs of their neighbours, and think not themselves interested in them. Accordingly, they have no assemblies to deliberate on public affairs. They are governed by no general laws to regulate their manners and their actions. They neither plant nor sow. They are fed by the fruit which the earth produces spontaneously. Their abode is on the summits of mountains, and caverns serve them for retreats."

This unsocial, uncultivated mode of living could not be of long continuance with regard to a great part of mankind. So many motives must have concurred to induce families to associate and mingle with each other, that several must have united early.

The connection of architecture, and the rest of the arts and sciences, with the laws, government, and manners of a people, are curious and useful subjects of inquiry. Their relations with the history of the human mind, is clear and indisputable.

Architecture takes its styles, its varieties, its colouring, if it may be so called, from the people who successively invented or introduced it, and their moral characters as a people may be deduced from their national styles of architecture, as will be hereafter shown.

Among the earliest specimens of monumental architecture, of which we read, Josephus acquaints us that the children of Seth erected two pillars, one of brick and the other of stone, on which they engraved the principles of astronomy. The making of bricks, the building with hewn stone, and the art of sculpture here shown, are proofs of a high degree of civilization, and a knowledge of the arts and sciences by no means contemptible.

In the second age of the world, which is calculated from the building of the Tower of Babel by the posterity of Noah, to the foundation of Athens by Cecrops, in the year before Christ, 1556, many large cities were founded. Early in this period, Nimrod laid the foundation of the Assyrian empire, and built Nineveh the celebrated metropolis of Assyria. Nearly at the same time Troy was founded by Scamander. Mizraim, the son of Ham, led a colony into Egypt, and laid the foundation of a kingdom; and Cadmus, the reputed in-

* Odyssey, l. ix. v. 106. and seq.

ventor of letters, with Moses the Jewish legislator, and Aaron his brother, flourished.

In this early period of history, the Assyrians cultivated the arts, and excelled in that of architecture. This second epoch, or age, is distinguished by the building of the Tower of Babel, and by the design formed by the posterity of Noah, and in part executed, of building a city in the plains of Shinai *. According to some historians, Belus, known in the scriptures by the name of Nimrod, the first King of Assyria, was the reputed projector of this structure. He built afterwards, in the same place, the celebrated city of Babylon, where he arrogated to himself the honours of divinity. Ninus, his son, erected to him the first known temple, consecrated a statue to his memory, and ordered it to be worshiped, which is the first recorded instance of idolatry.

Babylon was a large and beautiful city. Pliny relates (lib. vi. c. 26) that it was sixty miles in circumference, that its walls were two hundred feet high and fifty thick, and that the magnificent temple of Jupiter Belus was standing there in his time. Herodotus says it was four hundred and eighty furlongs in circumference; that it was full of magnificent structures, and celebrated for the temple of Belus; and that it had a hundred gates of brass, which proves that the fusion and mixture of metals were known, and that other arts, dependent on design, were then practised.

In less than two centuries after the flood, architecture was cultivated in Chaldea, China, Egypt, and Phœnicia. Moses † has preserved the names of several cities which Nimrod built in Chaldea. The Chinese, say the Fohi, enclosed cities and towns with walls (Martini, l. i. p. 28); and Semiramis, the wife of Ninus, finished the stupendous walls of Babylon, which were reckoned among the seven wonders of the world, and her palace which is celebrated by historians, for the historical and emblematical sculptures with which the walls were covered, and for the colossal statues of bronze and gold of Jupiter Belus, Ninus, Semiramis, and of her principal warriors and officers of state.

Architecture having thus been successfully practised among the Assyrians, was carried by them into Egypt, the most ancient country of which we have any authentic monuments existing, and also into other countries, the people of which they subjugated. The Egyptian style of architecture is characterized by a solidity of construction, by an originality of conception, and by a boldness of form. The civilization of this people, and the consequent cultivation of the arts commenced in Upper Egypt. The architectural monuments of this portion of Egypt are more numerous, more characteristic, and more ancient than those of Lower Egypt, whose inhabitants, for a long period after the knowledge of architecture in Upper Egypt, lived in natural caves and excavations in the mountains. The excavations now remaining and mentioned by travellers are possibly of this period; but the hieroglyphics and other figures with which they are sculptured are of a later period than that of their first reputed inhabitants.

Before entering on the details of the Egyptian monuments, I will first briefly analyze and describe the character of their architecture. The characteristics or elementary principles of Egyptian architecture are walls of great thickness, roofs generally of a single block of stone, which reached from wall to wall, a multitude of columns of various forms, proportions, and ornaments; seldom with bases, and when with that addition, they are mostly simple plinths. The capitals vary considerably, as may be seen in the works of Denon, Dr. Pococke, Belzoni, and other travellers. In some instances they are ornamented with foliage, in others they resemble a vase, and again in others a bell reversed. In Egyptian architecture there is no frieze, nor, correctly speaking, any cornice or architrave, and their substitutes may be called by either name, for something resembling them may be traced in the epistylia, or beams of stone which reach from column to column.

Another characteristic of Egyptian architecture is a peculiar narrowness of intercolumniation, being often not more than three feet and a half in width. The absence of arches, which are supplied by epistylia or stone beams, or lintels, is also another and peculiar characteristic of this original and singular style.

Dr. Pococke thinks that the ancient Egyptians were not ignorant of the construction of the arch, but does not give satisfactory proofs of the cause of his conviction. And the president De Goguet, in his learned dissertation on the origin of laws, arts, and sciences, assumes from their not using it that they did not understand it. The proofs which he gives of this ignorance might with as great propriety be adduced of their contempt of this mechanical means of covering apertures. The

* Gen. xi. 4. † Gen. x. 10.

nearest approach to the principle is to be seen in the entrance of the great pyramid at Memphis; of which an engraving is given in that work.

Belzoni agrees in opinion of their knowledge of the arch, and found specimens at Thebes and at Gournon, under the rocks which separate that place from the valley Babel el Malook.

However conjectural the origin of the Egyptian style may be, thus far at least is certain, that it is the fountain whence all succeeding people have drawn their most copious draughts, and is deserving of minute investigation. This style bears all the marks of freshness of invention drawn from native materials and national symbols. It is in the country of its origin that those colossal wonders, those architectural monsters, the Pyramids, are situate. It is needless to dwell upon a long description of these structures. They have been the theme of literati and travellers for centuries, and bear authentic testimony to the truth of history.

The largest of the three pyramids, said to have been built by Cheops or Chemnis, forms a square, whose base is six hundred feet, and its height nearly five hundred feet, or an area the size of Lincoln's Inn Fields, which has been said to have been constructed of this specific size by Inigo Jones, for the purpose of illustration; and its apex nearly a third higher than the summit of the cross of St. Paul's.

This mountain of masonry is constructed with stones of an extraordinary size, many of them being thirty feet long, four in height, and three in thickness. Herodotus, Diodorus Siculus, and Pliny say, that the stones employed in building the pyramids were brought from Ethiopia and Arabia. This fact De Goguet affects to doubt, for he says it is not likely that the kings of Egypt, having excellent materials at hand, would have unnecessarily expended immense sums to have fetched them from afar. And that the stones of the pyramids bear too great a resemblance to those which are found in the neighbourhood for him to imagine that they were not taken thence. Yet it is no less probable that the stones referred to by these ancient historians may have been the marble with which they were coated, and may have been fetched from the neighbourhood of the Red Sea, and from Upper Egypt.

The origin of the pyramids, the causes of their erection, and by whom are differently related; but Belzoni has, in some measure, set the question at rest by his recent discoveries, and proved that they were tombs of their founders.

Herodotus, the father of Pagan history, records, with an interesting accuracy, the methods used in constructing the greater pyramid, that leaves nothing to doubt. He relates that a hundred thousand workmen were employed at the same time in the construction of this pyramid. They were relieved by an equal number every three months. Ten years he reports on the authority of the Egyptian priests were employed in hewing and conveying the stones, and twenty more in finishing this enormous structure, which contained galleries, chambers, and a well.

An eminent writer in the Asiatic researches (Captain Wilford), in a very curious dissertation on this subject, translated from the ancient books of the Hindûs, says, the pyramids are there called three stupendous mountains of gold, silver, and of precious stones. They might be so named in the hyperbolical style of the eastern nations, but he conjectured they were so named from the coating with which they were covered, and that the first was said to be of *gold*, because it was covered with yellow marble; the second of *silver* being coated with white marble; and the third of *jewels and precious stones*, because it excelled the others in magnificence, being coated with beautiful variegated marbles, of a fine grain and exquisite lustre.

If these pyramids were entirely faced with marble and ornamented by sculpture, if these tremendous masses of eternal masonry were but cores to ornamental structures, such as have been described, they may, nay, they must have been, particularly if their summits were surmounted by the sky piercing obelisk, the grandest architectural monuments ever produced by the little builder man.

Near to these pyramids is the colossal head, called the Sphinx of Ghiza, the face of which resembles a woman, and the body that of a lion. This extraordinary figure is said to have been the sepulchre of the Egyptian King Amasis; and is one entire stone, being sculptured out of a solid rock.

Count Cabillia, who investigated this spot a short time previous to the enterprising Belzoni, succeeded, after much labour and difficulty, in uncovering the front of this colossus, and found a small temple between its front paws, and a large tablet of granite on its breast, inscribed with figures and hieroglyphics.

Among other celebrated examples of monumental architecture among the Egyp-

tians are their obelisks, which have been considered not only purely Egyptian in use, but also in origin. But if what Herodotus says be true, it must have been in Asia, and not in Egypt, that they had their origin.

This ancient author speaks of a pyramidal spire, erected by command of Semiramis, on the road to Babylon, which was a single stone one hundred and thirty feet in height, and twenty-five broad at its base. Pliny, however, insists on their Egyptian origin, and that a King of Heliopolis, called Mestres, was the first who caused one to be raised. Be this as it may, the monarchs and people of Egypt appear always to have had a great taste for obelisks, and the names of those who erected such may be found in the works of the elder Pliny.

Two of the principal of these grand monuments of art were erected by Sesostris, with the design of informing posterity of the extent of his power, and the number of the nations which he had conquered. They are each of a single piece of granite one hundred and eighty feet high.

Augustus, according to Pliny, transported one of these obelisks to Rome, and raised it in the Campus Martius. Of the three now in Rome, doubts have been raised whether either of them are of those raised by Sesostris, on account of their want of height. That now by the fountain of the Piazzo del Popolo is seventy-four feet without its modern pedestal; that of the Vatican, in front of St. Peter's, seventy-eight feet; and that on Trinita de Monte, forty-five feet without their pedestals; while those of Sesostris were of the enormous height of one hundred and eighty feet.

The obelisk of the Piazza del Popolo is that which was brought to Rome by Augustus, after being spared from the ravages of Cambyses, from respect to its origin, when that furious conqueror put all to fire and sword in Egypt, sparing neither palaces, nor temples, nor those superb monuments which, ruined as they are, are still the admiration of travellers.

From the place where it was originally elevated by Augustus, it was removed to its present situation by Pope Sextus V., in 1589, under the direction of the Cavalier Fontana, who also designed its pedestal and the contiguous fountain. The one now so great an ornament in the front of St. Peter's is also said to have been one of those erected by Sesostris at Heliopolis, the city of the sun, and was brought to Rome by Caligula, in a vessel, then the largest that had ever been seen at sea, and was afterwards sunk to form the port of Ostia. Caligula erected it in his circus at the Vatican, which was destroyed by Constantine the Great to build the first basilica of St. Peter; but he left the obelisk standing on the spot now occupied by the sacristy. It was removed at an expense of nearly £10,000 sterling, in 1586, by Sextus V. to its present situation, nearly a century before the construction of the fine colonnade which now surrounds it.

Of the great and beautiful temple of Dendera, or Tentyra, it is difficult to say whether it be monumental or sacred; but it may class with the former. The inhabitants of this place were great worshipers of Isis and Venus. From the ruins it appears, that the temples of this city were more beautiful and splendid, and in a better style of art and workmanship than any other now remaining in Egypt. Dr. Pocock, Captain Norden, Paul Lucas, Granger, Maillett, Cassas, and Denon have been diffuse and enthusiastic in their descriptions of Tentyra. Denon was so enraptured when he stood beneath the portico of the great temple at Tentyra that he exclaimed, "I thought myself, nay, I really was in the sanctuary of the arts and sciences. I was agitated by the multiplicity of objects, amazed by their novelty, and tormented by the fear that I should never behold them again." The extent of this temple was such, that the Arabs had formerly a village on its roof, the ruins of which are still to be seen.

Belzoni, in his travels in Egypt, speaking of this temple, says, "On the 19th, early in the morning, my curiosity was at a high pitch, the noted temple of Tentyra being the only thought I had in my head. On arriving before it, I was for some time at a loss where I should begin my examination. The numerous objects before me, all equally attractive, left me for a while in a state of suspense and astonishment." The enormous masses of stone employed in the edifice are so well disposed, that the eye discovers the most just proportion every where. The majestic appearance of its construction, the variety of its ornaments, and above all, the singularity of its preservation, had such an effect on Belzoni, that he seated himself on the ground, and was for a considerable time lost in admiration. It is the first Egyptian temple the traveller sees on ascending the Nile, and is certainly the most magnificent. It has an advantage over most others, from the good state of preservation it is in. It

is the cabinet of Egyptian art, the product of study for many centuries, and deserves all the praise that has been given to it. It was in this grand monument of the art that the celebrated Zodiac of Tentyra was found which M. M. Saulnier and Leloraine have recently carried away to Paris.

There are few subjects on which men of learning and taste have differed more than upon the art of the Egyptians. Some raising it to the skies, others scouting it as the barbarous of barbarism. De Goguet and his followers treated it with the utmost contempt. Denon and Belzoni overflow with praises of its beauties, and find no defects. Sonnini describes his sensations at the sight of their temples as difficult to define, so grand, so majestic did he find them. It was not a simple admiration merely, but an ecstasy which suspended the use of all his faculties. He remained for some time immoveable with rapture, and felt himself more than once inclined to prostrate himself, in token of veneration, before monuments, the rearing which appeared to transcend the strength and genius of man.

Yet after all the Egyptian style is monotonous, sombre, heavy, and unfit for our use; and, if studied exclusively till regard for antiquity engenders love for ugliness, is destructive of a pure taste. What made probably a delightful parlour in Egypt would make an excellent coal cellar in England. Yet, from its antiquity and excellence of construction, there are few styles more interesting to the antiquary, more delightful to the traveller, or bearing greater testimony to the truth of ancient history.

Although the lively Frenchman Sonnini says, that before it the so much boasted fabrics of Greece and Rome must come and bow down, yet, when it is calmly investigated and brought to the standard of judgment, it will not bear a momentary comparison with either for chasteness, real beauty, and true sublimity.

Architecture among the ancient Jews is a much darker and mere inexplicable subject. The Hebrews, Israelites, or Jews, by a residence in Egypt of nearly four hundred years, had attained a considerable degree of civilization. After their deliverance from captivity in that country, they led a wandering life for forty years. The temples which they had seen in Egypt dedicated to Egyptian idols, led them to consecrate a temple, where they might assemble in public worship of the true God. As it was necessary, from their mode of life during their sojournment in the wilderness, that it should be portable, they constructed it in the form of a spacious tent. In the plan and arrangement of this temporary erection, known by the name of the tabernacle, they took the form, it has been conjectured, of the Egyptian temples for their guide, they adopted in the details and ornaments a peculiar and national style. Conjecture and written description is all that is left us of the architecture of the Hebrews.

The architectural ruins of the monuments of the old inhabitants of that great empire, improperly called by Europeans Persia; the name of a single province being applied to the whole empire of *Iran*, as it is correctly denominated by the natives, and by the learned Mussulmans who resided in British India, are conclusive proofs of the grandeur of this ancient people. They differ in style both from the Egyptian and the Hindû, yet possess a general affinity. Sir Wm. Jones, after due investigation, (and who was ever a more ardent and laborious investigator than he?) concludes, from the most unexceptionable evidence, that the Iranian or Persian monarchy must have been the most ancient in the world; but he was doubtful to which of the three stocks, Hindû, Arabian, or Tartarian, the first kings of Iran belonged. He also, after a most learned and interesting disquisition, holds this proposition firmly established, that Iran, or Persia, was the true centre of population, of knowledge, of languages, and of arts. Of such a people an account of their architecture cannot but be of consequence; and it is therefore lamentable, that so few faithful delineations of their monuments have been taken.

The ruins of Persepolis are the principal existing remains of Persian architecture. This city was taken by Alexander, misnamed the Great, who was persuaded by Thais, a shameless courtesan, during a drunken revel, to set it on fire. At the place now called by the natives Kilmanac, or Ischilmanar, the forty columns, from the circumstance of there having been that number standing when the Mahometans invaded that part of Iran; but at present, there are not above nineteen left. The splendid edifice of which these ruins are the remains is supposed to have been erected by their King Huished, or Schemscheddin.

The style of the architecture and sculpture proves their antiquity. From the fact of every column being surmounted by a figure of some animal, and the well known circumstance of the ancient Persians performing their religious duties in the open

air, proves, in opposition to Millin (for the building could never have had architraves or a roof) that it was a temple. These singular columnar ruins are formed of a beautiful white marble, which is found in the mountain Rachmed, near the spot.

Count Caylus thought he perceived, and endeavoured to draw an analogy between the Persepolitan and the Egyptian styles; but we have not sufficient authority of the former to examine these claims.

The Hindû style of architecture, as exemplified in their monuments, appears to have been drawn from their original dwellings, caves, and excavations. Man is by nature a burrowing animal, and mostly carries his original propensities into states of refinement.

The period of authentic history in India, as in other countries, is comparatively of recent date. It is scarcely more than three thousand years since the most ancient and only genuine historical records of the ancient world, ascribed to Musah, or as we call him after the Greeks and Romans, Moses, were composed. Herodotus, the most ancient heathen historian whose works have reached our times, flourished a thousand years later; and Homer, the third ancient author who speaks of our art, is of too doubtful a period to establish dates.

The remains of architectural monuments in India, from style and construction, seem to prove an early connexion between that country and Egypt. The pyramids, the colossal statues, the obelisks, the sphinx, the mummy pits, and subterranean temples with colossal figures, and the lion headed sphinxes, recently discovered by Belzoni in Egypt, indicate the style and system of mythology to be akin to those of the indefatigable workmen who formed the vast excavations of Canarah, Elephanta, and Ellora. The various immense pagodas, pillars, and colossal images of Buddha and other Indian idols. These subjects will be farther discussed in the article SACRED ARCHITECTURE.

Another proof of a similarity of style between the ancient Egyptians and Hindûs is their mutually using lofty spires or obelisks, like the pillar of Allahabad; a striking resemblance to which is seen in the ancient round towers of Ireland; and also between the pyramids of Egypt and the colossal brick building in the Hadjipore district, near the Gunduc river. This immense pile of brick is about two days journey up the Gunduc, one of the tributary streams of the Ganges near Kesserean.

Mr. Burrows, who visited it about the year 1789, and took its dimensions, conceives it to be evidently intended for the well known image of the god Maha Deo; having originally been a cylinder placed upon the frustum of a cone, for the purpose of being seen at a distance. It is at present very much decayed; and it is not very easy to tell whether the upper part of the cylinder has been circular or conical. A considerable quantity of the outside has fallen down, but it is still seen a great distance up and down the river.

The dimensions of this colossal edifice, as given by Mr. Burrow, in the Asiatic Researches, are the diameter of the column at the base, three hundred and sixty-three feet; height of the conic frustum on which the cylinder is placed, ninety-three feet; diameter of the cylinder, sixty-four feet, which is nearly two-thirds of the size of the diameter of the base of the cupola of St. Paul's Cathedral; height of the present remains of the cylinder or round tower, sixty-five feet; entire height, one hundred and fifty-eight feet, or nearly the height of the monument, near London Bridge, without its pedestal. Both the cylinder and the cone are constructed of well burnt bricks, many of them two spans long and one broad, and others of the common size, but thinner.

The pillar of Allahabad, as described by the late Captain Hoare, is a lofty conical structure, covered with inscriptions, which are given in the second volume of the Transactions of the Asiatic Society, with an engraving of its elevation; but neither Captain Hoare, Mr. Colebrooke, nor Moonshee Mohammed Morad, who accompanied the captain to Allahabad, could obtain any information respecting it.

Architecture is of too much importance in the affairs of nations to be neglected or despised by the political economist: being the art by which we can best distinguish man in a civilized state from that of simple barbarity; and forms a scale of comparative cultivation, and of the progress of intellect between nation and nation.

Plato acknowledges that the science of politics and legislation began with the building of cities (Plat. de leg. l. 3 and 6): thus has architecture its political use, public buildings being the most distinguished and most durable ornaments of a country. It establishes a nation, draws people, creates commerce, makes the people love and respect their native country, which passion is the origin of all great actions in a commonwealth. "The emulation of the cities of Greece," says Wren, "was the true cause of their greatness, the obstinate valour of the Jews, occasioned by the love

of their magnificent temple, was a cement that held together that people for many ages, through infinite changes."

The care of public decency, and convenience was a great cause of the establishment of the Low Countries, and of many cities in the world. Modern Rome subsists still, by the ruins and imitation of its glorious ancestor; as does Jerusalem, by the temple of the sepulchre, and other remains of Helena's zeal.

Architecture aims at eternity; and is therefore the only art incapable of modes and fashions in its principles THE ORDERS. (See ORDERS.) It is also the most faithful recorder of the great and noble deeds of nations long since past away, and its works are speaking witnesses of the truth of history.

By the gigantic pyramids, by the lofty obelisks, by the stupendous temples and other architectural monuments of Egypt, we have authentic documents and ocular demonstration of the veracity of the historic pen which records the numbers and the power of the mighty people that once inhabited the extensive shores of the prolific Nile.

The Parthenon, the Erectheum, and the other brilliant gems of attic taste, which embellish the solitary wastes of ancient Athens, bear similar testimony to that refined taste which the ancient historians and critics of antiquity attribute to the people of Greece. The Acropolis and its lovely structures vouch for Pausanias; the Pyramids and Obelisks of Egypt for the venerable father of Pagan history (Herodotus); and Rome, the eternal city, owes its most lasting celebrity to architecture.

By architecture, too, we are informed how painting and how sculpture flourished among the ancients. For it has not only preserved upon its walls, as in the temple of Tentyra, in the magnificent baths of the Roman emperors, and on the walls of Herculaneum and Pompeii, positive vestiges of their pencils; but by ratifying, as it were, the truth of the historians' account of their architecture gives us a point whereon we may fix our belief in their descriptions of the powers of their ancient painters. Thus the existing works of Phidias, Ictinus, Callicrates, and Mnesicles prove the reality and the power of the highly and justly lauded productions of Zeuxis, Parrhasius, and Apelles, of which we have only *written* testimony (See PAINTING).

Much may be said of the political utility and moral advantages of a cultivation of architecture; but, a few words on an enlightened patronage of it may not be deemed extraneous from the subject.

This proper and judicious mode of administering patronage, or in other words justice, to a national art, of necessity includes a patronage of all the arts, and embellishes the names of monarchs and princes with unfading lustre; equal to any, and superior to most. A great and good prince is rendered yet more illustrious by such encouragement; and the infamy of a bad one is even gilded over to his cotemporaries, and overpowered to posterity by the brilliancy of its lustre. The bloody and drunken insanities of Alexander, by some called the Great, are shaded by his patronage and love of art; and the nameless atrocities of Hadrian are softened by his deeds in art almost to a name of repute; while the mild lustre of a Titus receives a brilliant accession from the same causes. So is the tyranny of Pericles adorned and neutralized by his enlightened patronage of Phidias. The Parthenon has remitted *his* sins, and Hadrianopolis, with its tasteful structures, sheds rays of glory round the head of the otherwise contemptible and infamous patron and associate of Antinous.

This art was held in such esteem by the Greeks, that none but the well born were allowed to study it, and princes gloried in its practice. If, as Sir Joshua Reynolds asserts, the value and rank of every art be in proportion to the mental labour employed in it, then should architecture rank very high. As this principle is observed or neglected, architecture becomes either a liberal art or a mechanical trade. In the hands of one man it makes the highest pretensions, as it is addressed to the noblest faculties and becomes a matter of philosophy; while in those of another it is reduced to a mere matter of ornament, and the architect has but the humble province of building elegant trifles.

In a preceding section an assertion was made that architecture was a less imitative art than either painting, sculpture, or engraving; that its elements are more purely original than those of the other arts, yet it is in a certain degree imitative of its own original types or prefigurations, which are first the *cavern*, as exemplified in the Egyptian and the Indian styles (see EGYPTIAN, INDIAN), which has been imitated also in our ancient British architecture, as may be seen in many examples, such as the ancient crypt of St. Peter's, Oxford, at Lastingham Priory, &c. where the resemblance is abundantly striking. The *tent* as in the Chinese

(see CHINESE) and its species, and the *cabin* or wooden hut, as displayed in the Greek and its imitators: that is to say, that the Egyptians, the Indians, and their like imitated in their buildings, their ancient excavations, their primeval dwellings. That the Chinese in their pagodas and other public buildings imitated their tent; that the Greeks imitated and refined carpentry in their marble temples; that the Romans followed the Greeks, that the early architects of Britain followed the Romans; that many architects of the present day follow the Greeks to a servile pedantry, and that the architects erroneously called Gothic imitated their primitive places of worship, their sacred groves.

Our great architect Sir Christopher Wren, whose merits as a writer are scarcely sufficiently acknowledged, carries this hypothesis still farther and in a most beautiful manner. He says, "Vitruvius hath led us the true way to find out the originals of the orders. When men first cohabited in civil commerce, there was a necessity of forums and public places of meeting. In cold countries people were obliged to shut out the air, the cold, and the rain; but in the hot countries where civility first began, they desired to exclude the sun only, and admit all possible air for coolness and health. This brought in naturally the use of porticoes or roofs for shade set upon columns. A walk of trees is more beautiful than the most artificial portico; but these not being easily preserved in market-places, they made the more durable shades of porticoes, in which we see they imitated nature; most trees that are in their prime, that are not saplings or dotards, observe near the proportion of Doric columns in the length of their bole before they part into branches. This I think the more natural comparison than that to the body of a man, in which there is little resemblance of a cylindrical body. The first columns were the very boles of trees turned or cut in prisms of many sides. A little curiosity would induce to lay the torus at the top: and the conjecture is not amiss, to say it was first a band of iron to keep the clefts occasioned by the sun from opening with the weight above; and to keep the weather from piercing these clefts it was necessary to cover it with the plinth or square board; and the architrave conjoined all the columns in length;" as may be seen in the drawing of the flank of the Grecian temple

Of these primitive styles, that of the Egyptian or *cavern* style is dark, heavy, and monotonous. The Chinese or *tent* style light, feeble, and fragile; and the Greek or *cabin* style is at once solid and light, is susceptible of being made more or less solid or light according to necessity or required character; is the richest in its combinations, and that which unites in itself, in the highest degree, the advantages of solidity and an infinite agreeableness of variety. Of the elements of the *cabin* or Greek style, the elegant critic Algarotti says in his *Saggis Sopra l' Architettura*, that is the material the most capable of furnishing the art with the greatest number of profiles, modifications, and varied ornaments, which said profiles, modifications, and varied ornaments so highly prized by the Italian critic the Greeks have indurated, sublimed, and immortalized; while the Romans have debased them, and in many instances lowered them below even their original types.

While upon the subject of that imitation which is essential to a pure style in architecture, an imitation by no means destructive of legitimate invention; a few words may be allowed by way of elucidation.

By *imitation* is not meant that servile counterfeiting of an original which is so much the practice of some of our modern Greeks, who copy the very fractions of lines and profiles, instead of composing in the same spirit, BUT that bold pursuit of a sublime original by parallel images and examples, sometimes more refined but never below their type, which distinguishes true genius cultivated and improved by practice and study from the common herd of lineal copyists modules, of minutes, and of lines. Such a free imitation as the Æneid is of the Iliad; such a bold and original imitation as Milton is of Homer and of Virgil; such imitations in short as bear the marks of real genius; "that quality without which judgment is cold, and knowledge is inert; that energy which collects, combines, amplifies, and animates."

There are two ways by which a people can imitate the style of architecture of another country; the one true and the other false. The true mode is less an imitation than an adoption, and consists in receiving as an alphabet in their entire shape the system, the rules, and the taste of a style of architecture. It was thus that the Romans adopted the architecture of the Greeks, or perhaps I should say of the Etrusians, which was incontestibly the same. It was thus also with the nations of modern Europe, who, abandoning the Gothic and the incongruities of the middle

ages, have appropriated the Greek and Roman styles by legitimate adoption.

It was after this true mode that Palladio, in his imitations and inventive restorations of Roman magnificence, has founded a legitimate school. It was thus that Michel Angiolo fairly imitated the Pantheon of Agrippa in his tremendous cupola of the Vatican. And it was thus that our illustrious countryman Wren, whose transcendent talents I have recently endeavoured to display to the public, rivalled in design, and surpassed in purity of taste and scientific construction, the Basilica of St. Peter's at Rome, the work of more than twenty architects, supported by the treasure of the Christian world, and by the protection and under the reigns of twenty successive popes; in his unrivalled and splendid work of St. Paul, London, that glorious, though unfinished monument of the piety and magnificence of our ancestors.

Such imitations are far from plagiarisms, being, on the contrary, skilful adoptions or adaptations, bearing proofs of legitimate and inventive talents. "Genius," says Reynolds, "at least what is generally so called, is the child of imitation; it is in vain to endeavour to invent without materials on which the mind may work, and from which invention must originate. Nothing can come of nothing." (Disc. 1).

The other or false mode of imitation is plain plagiarism, and nothing better than downright theft, without even that ingenuity to conceal the theft, which, among the Lacedæmonians, always procured pardon for the thief. This mode consists, as it were, in importing by wholesale such portions of a foreign or ancient style as appears suited to the purposes of its importers, and converting them to their own use, not as their original inventors would have done in their time and place, but forcibly torturing ancient art to modern uses; like as the gipsies are said to do when they steal children, to disfigure them that they may not be known. These are mean copiers and importers of architecture, common borrowers. The others, liberal adopters of the great works of the great masters of our art, from whom "the modern arts were revived, and by whose means they must be restored a second time." "However it may mortify our vanity," says Reynolds, "we must be forced to allow them to be our masters; and we may venture to prophesy, that when they cease to be studied, arts will no longer flourish, and we shall again relapse into barbarism." (Disc. vi.)

It was not in this way that the Greeks borrowed the idea of the Corinthian capital from the Egyptians. They boldly adapted and naturalized it, as well as other types of their orders, which may be seen by comparing them; and concealed it with Spartan skill, gratifying their national vanity in giving currency to the poetical hypothesis of Callimachus and the votive vase. The primitive types of the two capitals are the same, as may be seen by comparison; the original of each is a vase surrounded by foliage and covered by an abacus, and a verbal description of the two would very nearly assimilate. The other orders, namely, the Doric and the Ionic, are as evidently drawn from the same sources. Yet in the essentials of a national style, they widely differ. The Egyptians properly used the plants and flowers of Egypt, and the Greeks those of Greece.

If, however, the architecture of Greece be, as is often and perhaps truly asserted, borrowed, adopted, or stolen from that of the Egyptians, the Greeks have certainly most gorgeously embellished their robbery; and if from their own primæval huts and cabins, the metamorphosis of the cabin into the temple is as rapid and complete as that of the cottage of Baucis and Philemon, in the Metamorphoses of Ovid:

> "Illa vetus, dominis etiam casa parva duobus,
> Vertitur in templum: furcas subiere columnæ."
> Ov. lib. viii.

See IMITATION.

The principal remains of the most ancient examples of the Indian or Hindû style, which have been recently discovered, are of a singular and extraordinary kind, being mostly excavations in the solid rock. They are supposed by some antiquaries to have been subterranean temples; but many portions of them are undoubtedly monumental or commemorative. Immense sculptured caverns, of this description, have been discovered in various parts of the Indies, which are wonderful monuments of the skill and industry of the people who achieved them. These subterraneous caverns are apparently as ancient as the oldest Egyptian temples; and M. D'Ancarville, in his Recherches sur l'Origine, l'Esprit, et les Progrès des Arts de la Grèce, thinks them anterior to the time of about two thousand years before Christ.

Some archaiologists have supposed these wonderful sculptured caverns to be no older than the first ages of Christianity, after the natives of India had received the knowledge of the liberal arts and sciences from the Greeks. The improbability of

this hypothesis is apparent at the first glance; for, in the first place, the Greeks did not practice excavations; and secondly, the style, character, and execution are as different as light and darkness from the style, character, and execution of the architecture of the Greeks.

Dr. Robertson, on the contrary, thinks them monuments of very remote antiquity, as the natives cannot, either from history or tradition, give any information concerning the time in which they were excavated, but universally ascribe them to the power of a superior race of beings. Thus Stonehenge has been attributed to the magical power of Merlin the enchanter; and the devil is often celebrated as an architect of first rate skill, and has given his name to many a monument of human power.

The columns found in these caverns are rudely formed; and although much inferior to Grecian beauty, are, in many instances, more agreeable to the eye of taste than those of Egypt. Their capitals represent round cushions pressed down by the superincumbent weight. The elegance of some of these columns is confirmed by Col. Call, formerly chief engineer at Madras, who urges this circumstance as a proof of the early and high civilization of the Hindûs. "It may safely be remarked," says he, "that no part of the world has more marks of antiquity for arts, sciences, and civilization than the peninsula of India, from the Ganges to Cape Comorin. I think the carvings on some of the pagodas and choultries, as well as the grandeur of the work, exceed any thing of the present day, not only for the delicacy of the chisel, but the expense of construction, considering, in many instances, to what distances the component parts were carried, and to what heights raised.

The column from a building near Muddumpore, as engraved in Daniels' Views, although of great antiquity, has the elements of a beautiful style. The gradation from the octangular base to the multangular shaft, setting off to the circular upper shaft, is at once elegant, and possessed of the greatest constructive strength. The masculine style of the recking, under the quadrifrontal capital, is bold and characteristic.

Another fine example of a monumental column worthy of notice is from an ancient Indian temple near to Benares, a splendid, rich, and populous city, on the north side of the Ganges, which is here very broad and the banks very high. The appearance of Benares from the water is represented by travellers as being very beautiful. Several Hindû temples embellish the banks of the river, and many other buildings, public and private, ancient and modern, of a style and execution truly magnificent.

This singular and most beautiful column, which to the variety of India adds many of the ornamental graces of the Grecian style, is thought by Mr. Hodges, who made the drawing whence the plate in his work was engraven, to have been of the age of Alexander. This eminent artist and indefatigable traveller conceived, from the striking resemblance which many of its parts bear to the Greek style, that it must have been executed by Grecian artists shortly after Alexander's expedition into India; which, according to Dr. Robertson, was about one hundred and sixty years after the reign of Darius Hystaspes. The biographer of Apollonius Tyraneus (*ibid.*) relates, that when he visited India, three hundred and seventy-three years after Alexander's expedition, twelve stupendous altars or monumental stones, which he erected in commemoration of his exploits, were still remaining with legible inscriptions. Be this as it may, the elements and style of this beautiful monument of antiquity completely bear out the hypothesis of Mr. Hodges. Its elements, perhaps from compliment to the country, are in every respect Indian; its ornaments are purely Greek. Its base, its shaft, its capital are all, in shape, situation, and distribution, completely Hindû; with its multangular and mixed circular shaft, its quadrifrontal capital, and tress-shaped abacus. Its decorative sculptures are essentially and finely Greek. In its pedestal is found the Grecian honeysuckle in its greatest purity; the angles of the shaft are embellished with the sacred water leaves of the Hindû mythology; above these are Doric flutes; and in the capital are found the leaves of the Greek acanthus.

For beauty of outline, for a graceful setting off from a square to an octagon, and thence to a circle, for richness and purity of style, the column of Benares stands unrivalled in Eastern art.

A few more specimens of Indian monumental art are the series of examples from the early periods of the Mogul empire, which exhibit their modes of construction both square and circular, and prove their early knowledge of the arch, the cupola, and other difficult and scientific modes of construction; and to which the preceding observations are equally applicable.

Another proof of a similarity of style between the architecture of the ancient Egyptians and Hindus, is their mutually using lofty spires like the obelisks of the former, and the monumental towers of the latter, as in the tower of Allahabad, and the lofty conical obelisk on the Shikargah or hunting place of Feeroz Shah; the Pyramids of Egypt, and the conical brick monument in the Hadjepore district, referred to and described in the last section.

THE MONUMENTAL *style of architecture among the Greeks* comes into a smaller compass than most other nations. The observations on their pure and fine style will, therefore, be reserved to another section, when descanting on their sacred buildings. Their principal monuments are the tower of the winds, which was also a clepsydra or water clock, and the beautiful little choragic monument of Lysicrates, so celebrated for its elegant variation upon the theme of the Doric order. Another no less beautiful is the choragic monument of Thrasyllus, sometimes called the lanthorn of Demosthenes, so well known to every student of Athenian antiquities.

The triumphal arches of the Romans are among their grandest architectural monuments or luxuries of this magnificent people. Nothing which could tend to perpetuate the fame of the conquerors was omitted in the design. Some were constructed with two and others with three openings, and the most magnificent were erected on the public road, called the triumphal way.

On a triumph being decreed, the Roman senate received the conqueror at the Porta Capena, near the Tiber, which was the entrance to the city from the Appian way. A brief description of them, for they very nearly resemble each other, is all that the limits of this work will allow.

The arch of Augustus at Rimini has but a single opening, about thirty feet in width, crowned with a pediment, contrary to the usual practice, which was to leave them flat for a triumphal car. It is a beautiful specimen of construction, but much mutilated.

The arches of Titus at Rome and of Trajan at Beneventi bear a great resemblance to each other. The former is composed of that beautiful composite order, which is said to have been the earliest use of this order.

The arch called the Arch of the Goldsmiths at Rome is a curious example. It is small in size, has but a single opening, is covered by a flat lintol, and is much embellished by sculpture.

The arches of Septimius Severus and of Constantine are of three openings. The latter is embellished with ornaments shamelessly stripped from the arch of Trajan, and from their absurd application, we are the more disgusted with the barbarism of the despoilers. The arch of Severus, the ruins of which are represented in Piranesi, is in fine preservation, and serves as a portico to the church of St. George in Vellario.

The Roman style of architecture possesses more variety of style and buildings than that of Greece. The Roman people had also a more extended dominion, more personal and natural pride, and were more partial to show and magnificence than the graver and more philosophical Greeks. Hence arose the greater number and more splendid embellishments of their architectural achievements.

They also erected edifices to commemorate every great event; and much of their architecture may be classed under the monumental syle. "When the Romans wished to commemorate and perpetuate," says Tacitus, "the remembrance of any remarkable event, they raised an altar stone, and engraved thereon the particulars of the transaction."

This great historian relates in his account of the public discussions which ensued in Rome on the death of Augustus, that the objectors to the honours paid to that emperor complained that the honours due to the gods were no longer sacred. Temples were built and edifices erected to *him*. A mortal man was adored, and priests and pontiffs were appointed to pay him impious homage. This species of homage Augustus was wise enough to decline when alive; and Suetonius says, "although Augustus knew that temples were often raised in the provinces in honour of the proconsuls, allowed none to be raised to himself, unless they were at the same time dedicated to the Roman people. In the city, he absolutely refused all honours of the kind." These facts prove that the raising and dedicating a temple was a common, nay almost an every day transaction.

Tacitus is perpetually adverting to the numerous architectural monuments of his public spirited countrymen. But unfortunately their character in taste was inferior both to their wealth and their vanity. They cultivated few things supremely but eloquence and the art of war. And oratory and the sword were the only steps to power and greatness in Rome. Greece was fallen into a state of degeneracy.

Point, antithesis, and conceit, were the delight of vain preceptors who filled the city of Rome, and held schools of declamation (which Cicero properly called ludus impudentiæ); and novelty, ornament, and bad taste, crowded their public monuments.

With such a people architecture could not but flourish; and had they, like the Greeks, ennobled the profession of architecture, as they did that of the orator, as fine a taste would doubtlessly have prevailed in the one country as in the other. Their very wars encouraged the arts. Statues and triumphal arches followed victory like a shadow, and the spoils of the conquered, prisoners of war, with various pictures of battles, mountains, and rivers, were displayed with great pomp.

Another instance of the architectural grandeur of the Romans, on the authority of Suetonius, is worth reciting. Augustus, to perpetuate the memory of his glorious victory at Actium, built the city of Nicopolis, near the bay where he obtained his victory, establishing quinquennial games; and having enlarged an ancient temple of Apollo, adorned it with naval spoils, and dedicated it to Neptune and to Mars.

On the death of Germanicus triumphal arches were ordered to be erected at Rome, on the Rhine, and Mount Amanus in Syria, with inscriptions setting forth the splendour of his actions, and in direct terms declaring that he died in the service of his country. At Antioch, where his remains were burned, a mausoleum was erected; and at Epidaphne, where he died, a cenotaph was constructed to his memory. Of the several statues, and the places where they were to be worshiped, "it would be difficult," says Tacitus, "to give a regular catalogue. It was farther proposed that a shield of pure gold, exceeding the ordinary size, should be dedicated to him in the place allotted to orators of distinguished eloquence."

These marks of respect are of less value to the dead than to the living, and those who witness such grateful remembrances acquire thereby an additional stimulus towards rivalling them.

"Victory and Westminster Abbey" was a sentiment uppermost in the mind of Nelson, and they who are benefited by the services of statesmen, and by the victories of warriors, should not be sparing of durable monuments of gratitude, even if it be only with the view of exciting the aspiration of contemporaries.

Of Roman architecture the concealed author of Guy Mannering says, "their fortifications, their aquæducts, their theatres, their fountains, all their public works bear the grave, solid, and majestic character of their language; and our modern labours, like our modern tongues, seem but constructed out of their fragments." Yet with all this grandeur of conception and solidity of execution, their works surprise more from their immensity of size than the beauty of their detail. This produced an unnatural exaggeration of style in all their arts. Their architecture has given us the swoln composite order; their sculpture the exaggerated style of the Gladiator, and their latter poetry the hyperboles of Lucan and of Statius. The Colosseum alone consumed more materials and cost more money than perhaps all the temples of Athens put together; and the Roman forum would possibly have contained them all. Imperial Rome vied with the republic in architectural splendour, and Julius Cæsar commenced a career of magnificence in the provinces, and his nephew Augustus led the way among the emperors; justly boasting that he found Rome of birch and left it of marble. It would be well if a British Minerva could arise in imitation of the Athenian goddess, and by her magic lance convert the half burnt bricks and compo and mastic of modern London into even decent stone!

One more species of monumental structures, used by the ancient Romans, alone remain to be mentioned; their commemorative columns.

They have several still remaining, one dedicated to the Emperor Phocas stands near the temple of Concord. It is of Greek marble, fluted and of the Corinthian order, four feet diameter and fifty-four high including the pedestal. Another worthy of notice is that of Marcus Aurelius, erected by the Roman senate and people in honour of that emperor for his victories over the Marcomanni. Aurelius afterwards dedicated it to his father-in-law Antoninus Pius, as is expressed on the pedestal; hence it is mostly called the column of Antoninus. It is of the Doric order, eleven feet six inches in diameter and one hundred and forty-eight feet high.

The loftiest, however, in Rome is

> "Trajan's column tall,
> From whose low base the sculptures wind aloft;
> And lead through various toils up the rough steep
> Its hero to the skies." DYER.

This column is one of the most celebrated monuments of antiquity, and has endured the stormy waste of time upwards of seventeen hundred years. The column of Alexandria, commonly called Pompey's pillar,

is about ninety-five feet in height; Trajans, including the pedestal and statue, one hundred and thirty-two feet; and Wren's fine monumental column near London Bridge, commemorative of the destruction and rebuilding of the British metropolis, including the pedestal and vase of flames, two hundred and two feet. The latter is quoted to show its superiority in point of height and size over those of ancient Rome.

British monumental architecture. The next section of my subject leads us to the obscure days of the ancient British monumental style, and I confess the more I search the more I am bewildered in fiction, fable, and hypothesis.

The commencement of the art in England was similar to its commencement in every other country. The caverns and huts of the aborigines of these islands were gradually improved from mere necessaries of life to comforts and luxuries.

There exist in this country the most indisputable proofs of a primitive or aboriginal style of architecture and successive introductions of foreign styles at various periods of our history; and here again it may be observed, does architecture prove the truth of history.

Egypt may boast of its pyramids, India of its excavated temples, Italy of its Pæstum, and Greece of its Cyclopean works, alike defying history and conjecture; yet England and Ireland possess antiquities as primitive, as aboriginal, and as remote from accurate date in the Avebury, the Cromlechs, the Stonehenge of England, the round towers, the excavations, the ruins of the seven churches, and the bed of St. Kieven in Ireland.

The origin of the architecture of a nation is so intimately connected with that of the nation itself, that an inquiry into the one necessarily involves the other; therefore, rejecting the fables of our earlier chroniclers, we must search for the truth in the monuments themselves.

Sir William Jones in his luminous discourse on the origin and families of nations, says, with our great Newton, "We must not admit more causes of natural things than those which are true, and sufficiently account for natural phenomena;" and that one pair at least of every living species must at first have been created, and that one human pair was sufficient for the population of our globe, in a period of no considerable length (on the very moderate supposition of lawyers and political arithmeticians, that one pair of individuals left on average two children, and each of them two more) is evident from the rapid increase of numbers in geometrical progression, so well known to those who have ever taken the trouble to sum a series of as many terms as they suppose generations of men in two or three thousand years.

This profound philosopher then proceeds with all the learning and scepticism of a genuine searcher after truth, to compare the Mosaic account of the peopling of our globe with probability and with history; and comes, after a series of incontrovertible arguments, to the supposition that the children of Jáfet seem from the traces of Sklavonian names, and the mention of their having been *enlarged*, to have spread themselves far and wide, and to have produced the race which for want of a correct appellation we call *Tartarian;* the colonies formed by the sons of Ham and Shem appear to have been nearly simultaneous; and among those of the latter branch he found so many names preserved to this day in Arabia, that he hesitated not to pronounce them to be the same people, whom hitherto we have denominated Arabs; while the former branch, the most powerful and adventurous, of whom were the progeny of Cush, Misr, and Rama, names remaining unchanged to this hour in Sanscrit, and highly revered by the Hindûs, were, in all probability, the race denominated Indian.

From several tours recently made in the most interesting parts of Ireland for architectural antiquities, and from considerable investigation into its history, the author is of opinion that that country was originally peopled from the east. The ancient architecture, the ancient religion, the ancient language of Ireland and those of the inhabitants of Hindustan and other oriental countries coinciding in a wonderful manner.

Equal coincidences in their architecture occasionally recur; the pyramids of Egypt have narrow passages leading to dark chambers or temples under ground. At Benares, the most ancient seat of Braminical learning, there are also pyramids on a small scale with subterraneous passages, which are said to extend many miles. These narrow passages leading to the cell or adytum of the temple appear to render the only apartment less accessible and to inspire the votaries with more awe. There we find a perfect resemblance between the worship of the ancient Egyptians and the ancient inhabitants of Hindustan. The caves of the oracle at Delphos, of Trophonius, and of New Grange in Ireland, had narrow passages answering the purposes of those in Egypt and India; "nor is it un-

reasonable to suppose," says Captain Wilford in his learned dissertations on Egypt from the ancient books of the Hindûs, "that the fabulous relations of the Grot in Italy, and of the purgatory of St. Patrick in Ireland were derived from a similar practice and motive which seem to have prevailed over the whole Pagan world, and are often alluded to in scripture."

New Grange is one among many caverns in Ireland, which the author of this work has visited. It is a large mound or pyramid, surrounded by a circle of stones, near the county town of Drogheda, about twenty-five miles north of Dublin. The gallery is sixty-two feet long, and the arms of the cross or transepts twenty feet each. The cupola over the centre of the temple at the intersection of the cross is formed of long flat stones projecting one over the other, till they meet in the centre like one of the openings in the great Egyptian pyramid.

The cavern is, he doubts not, of as great antiquity as any in Europe, and was a burying place of the ancient Irish, although its cross-like form has induced some to think of the time of Christianity; on its first opening, a gold coin of the Emperor Valentinian was found in it, which Dr. Llhwyd observes might bespeak it Roman, but that a rude carving at the entry of the cave seems to denote it to be of a barbarous origin.

Nothing is here said of the similarity between the names of Erin (Ireland) and Iran (Persia), conjectural etymologies being too vague for historical research.

The round towers of Ireland of which he has a list of nearly seventy now remaining in various parts of the island, from Cork to the Causeway, and from Wexford to Limerick, the greater part of which he visited and investigated; their large and singular cromlechs and innumerable other antiquities which deserve a course of investigation to themselves, will be farther discussed in a future part of this dictionary. See Round Tower.

II. Sacred Architecture. To trace fully the origin and progress of sacred architecture among the antediluvians, after what has been said of the monumental architecture of that ancient period, would be to go over almost the same ground, which was reviewed in the early part of the first section. Therefore a brief survey of these ancient and problematical times, with an account of the principal works in this class of architecture and an analysis of principles, will be all that is necessary for this portion of our work.

Among uncultivated nations, such as modern refinement are pleased to term savage, Architecture as a fine art is scarcely known, and their painting and sculpture are as rude as their manners. We find those arts, with music, dancing, eloquence, and poetry, in every country and among every people which have arrived at the first degree of civilization; and mankind was certainly in this state in the earliest antediluvian times, after the families of Adam's immediate progeny settled themselves.

The connexion between architecture and the rest of the arts and sciences, with the laws, government, and manners of a people are curious and useful subjects of inquiry. Their relations with the history of the human mind are clear and indisputable, although some shallow reasoners have affected to think them beneath the notice of statesmen and philosophers; and that the fine arts are to be considered only as mere amusements and relaxations to superior minds.

Sacred Architecture commenced with the first adoration of man to his Creator. The first altar of a single stone surrounded by our grateful forefathers offering the first fruits of their flock, and corn, and fruit, was the first temple. Such were the cromlechs of Ireland and Britain, which soon increased from the circle of stones to the beauty of the rotunda, and from the wood covered temple of ancient Attica to the full blown perfection and splendour of the Parthenon.

Idolatry, added to the splendour of ancient temples, and Ninus, the first recorded idolater, the son of Belus or Nimrod, erected the earliest temple to the human gods of antiquity, in commemoration of his father, whom he ordered to be worshiped, and dedicated a temple to him as Jupiter Belus. This temple, which Herodotus describes as of splendid dimensions and design, contained the celebrated brazen statue of Jupiter Belus, which was cast about two hundred years after the flood, and is the same idol mentioned in the Scriptures, under the name of Baal, and Baal Phegor.

In less than two hundred years after the flood, architecture was cultivated in Chaldea, China, Egypt, and Phœnicia. Sacred edifices were among the most splendid and costly of their productions. Among the sovereigns recorded in these ancient days is Semiramis, the wife of Ninus, who finished in this age the stupendous walls of Babylon, which were reckoned among the seven wonders of the world. This illustrious princess, to whom the adminis-

tration of the government was left by her husband, ascended the throne about one thousand seven hundred years before the Christian era, and is one of the earliest examples in history of a throne being filled by a female.

Diodorus and other ancient writers relate that among the splendid works of this princess were the statues of Jupiter Belus, Ninus, herself, her son Nimas, and her chief men of her kingdom, both warriors and statesmen. She also erected a magnificent temple to Jupiter Belus, on the summit of which she erected three statues of gold, representing Jupiter, Juno, and Rhea.

Many other similar works of grandeur and idolatry are mentioned in history, as having been erected by this princess, of which the necessary limits of this work will not find room even for enumeration. But it is well known that there were several queens of Assyria of this name; and these authors may have attributed to the great Semiramis, the spouse of Ninus, the works that were probably of another age, and by another princess of the same name.

From these ancient examples founded on the authority of the most ancient historians, we find that sacred architecture flourished in a splendid manner even in these remote ages. None of these relations, magnificent and splendid as they now appear, not even the walls of Babylon, the tower of Babel, nor the extent of ancient Nineveh, which is said to have included a circuit of nearly sixty miles, should surprise us into an unbelief of their authority from their stupendous dimensions alone: for if we reflect upon the existing pyramids of Egypt, and know that the great wall of China, also a work of high antiquity, is fifteen hundred miles in length, forty-five feet in height, and eighteen feet in thickness, with towers of corresponding proportions and reasonable distances, we need not doubt on these grounds. Here again we find architecture bearing testimony to the truth of history.

Architecture having been thus successfully cultivated among the Assyrians, was carried by them into Egypt, and other countries which they conquered.

"The first temples," says Wren, "were, in all probability, in the ruder times, only little cellæ (cells) to inclose the idol within, with no other light than a large door to discover it to the people when the priest saw proper, and when he went in alone to offer incense, the people paying adoration without doors; for all sacrifices were performed in the open air, before the front of the temple; but in the southern climates a grove was necessary, not only to shade the devout, but, from the darkness of the place, to strike some terror and recollection in their approaches; therefore trees being always an adjunct to the cellæ, the Israelites were commanded to destroy not only the idols, but also to cut down the groves which surrounded them: but trees decaying with time, or not equally growing (though planted at first in good order) or possibly not having room; when the temples were brought into cities, the like walks were represented with stone columns, supporting the more durable shade of a roof instead of the arbour of spreading boughs; and still in the ornaments of stone work was imitated (as well as the materials would admit), both in the capitals, friezes, and mouldings, a foliage, or sort of work composed of leaves, which remains to this age."

This was, in our ingenious countryman Sir Christopher Wren's opinion, the true origin of colonnades environing the temples in double and single aisles; and there is no doubt but it was equally the origin of the orders instead of being derived from the proportions of the human body, as have been assigned to them by imaginations more fanciful than correct; and to which they bear no reasonable analogy. What resemblance is there between a doric column and a man of herculean proportion, an Ionic column and a matron, or a Corinthian column and a beauteous virgin, who by the way is more overloaded with entablature, and has more to sustain than either of the other orders.

In looking at a Grecian doric column it is asked, referring at the same time to the historical origin of the order, does it more resemble a trunk of a tree cut off immediately above the root, and at the beginning of the spreading of the branches, or the proportion of a man? or at the Ionic, which the Vitruvians called a decent matron, with her locks parted over the forehead? does it not more resemble a slimmer trunk ornamented with an abacus, and the spirals formed of the ornamented bark? The Corinthian certainly more resembles in sober practice the foliage of a tree than the braided locks of a youthful female; but, more of this in its proper place, when investigating the classical orders of antiquity. See Orders.

Few nations of antiquity cultivated sacred architecture with greater devotion or with more splendour than did the ancient Egyptians, particularly in that part of their

country called Thebais, or Upper Egypt. The chief pride of this country was its principal city Thebes. The Thebais is the most southerly part of Egypt nearest to Ethiopia, and was nearly as large as the other two parts of Egypt together, including in its boundaries all the country on both sides of the Nile down to Heptanomis.

At the time of the Trojan war Thebes was reckoned the most opulent and the best peopled city in the world. Among the principal edifices of the Thebais was the magnificent palace and temple of Memnon, which, according to Strabo, stood in the city of Abydus, the second city of Thebes, about seven miles and a half to the west of the Nile; that a celebrated temple of Osiris was near to it, that it was also famed for a deep well or pool of water, with winding steps all round it; that the stones used in it were of an astonishing magnitude, and the sculpture on them excellent.

Among other principal structures which embellished this portion of Egypt was the palace of Ptolemy, at Ptolemais, a city which he decorated with many costly sacred buildings. Under the Ptolemies the style of architecture in Egypt sustained a complete revolution, and their buildings approached the style which was afterwards so beautifully refined by the Greeks, who brought it to complete perfection; yet they never reached that pure and noble style which distinguished the tasteful inhabitants of Attica.

These works were probably executed by Greek architects called into Egypt by the Ptolemies and their successors. This conjecture appears the better founded since a modern traveller (Granger) describes a temple which he had seen of the Corinthian order; and farther observes, in speaking of a palace which he believes made part of ancient Thebes, that the capitals of the columns were of the composite order, highly finished.

The Thebes, just alluded to, was distinguished from Thebes in Bœotia by the epithet Hecatonpylos, the hundred gated Thebes. It was not only the most beautiful city in all Egypt, but is supposed by Diodorus, and other ancient writers, to have surpassed all others of its time in the known world, as well for the splendour of its buildings, as for extent, and the number of its inhabitants.

Homer says that Thebes was able to furnish twenty thousand chariots of war. By this we may judge of the number of inhabitants which it contained. Tacitus relates, that when Germanicus visited its magnificent ruins, there were still to be seen, on ancient obelisks, a pompous description, in Egyptian characters, of the wealth and grandeur of the place. From the account of an elderly priest who interpreted to him the meaning of the hieroglyphics, it appeared that Thebes at one time contained within her walls no less than seven hundred thousand men capable of bearing arms. The objects, however, which most concern the present work are its sacred edifices. Its four principal temples were of an immense size, and of a singular beauty of workmanship. The gold, ivory, precious stones, and other costly and valuable ornaments with which they were decorated were stripped off and carried away by the Persians when Cambyses conquered and ravaged Egypt.

At Cnuphis, a city of the Thebais, so called from the god of that name, was a magnificent temple dedicated to that idol. At Carnack, another large city near Thebes, there are still the remains of a superb temple of Jupiter, now the most perfect in that part of Egypt. The magnificent temple of Apollo, at Apollonopolis, was one hundred and seventy feet long, one hundred and eighty feet broad, and seventy feet high, as appears by the ruins which still remain. The characters of all these buildings bear a close resemblance to each other, and are standard characteristics of Egyptian architecture. The inhabitants of Tentyra, or Dandera, were great worshippers of Iris and of Venus. From the splendid ruins of this city it appears that their temples were more beautiful and splendid, and in a better style of art than any other in Egypt.

The resemblance between many ancient and distant nations, in their language, manners, customs, architecture, and sculpture are very great, but when first causes are investigated, by no means surprising. Sir William Jones, in his invaluable discourses, which are the concrete of many volumes, observing on the language, manners, and antiquities of the ancient inhabitants of India, comes to the indisputable result that they had an immemorial affinity with the ancient Persians, Ethiopians, and Egyptians; the Phœnicians, Greeks, and Tuscans; the Scythians or Goths, and Celts; the Chinese, Japanese, and Peruvians: and it will be our endeavour to show, in the course of this article, in which the architecture of these various countries are respectively discussed, that their ancient buildings all corroborate and prove this important fact in the history of mankind.

The singular and extraordinary subter-

raneous temples at Elephante, Ellora, and other parts of India, are curious objects of investigation, and are alluded to in the first section of this article. Mr. Goldingham, one of the honourable the East India Company's astronomers at Fort St. George, who had applied himself with great assiduity to the study of the antiquities of Hindustan, visited the Elephanta Cave in 1795, and published an interesting and faithful account of this wonderful effort of human skill in the fourth volume of the Asiatic researches. This gentleman argues with great ability in favour of it having been a Hindû temple; but General Carnac of Calcutta, who introduced and prefaced Mr. Goldingham's paper, and understood the antiquities of India in no common way, does not assent to this opinion. These immense excavations, cut out of the solid rock, appeared to the general to be operations of too great labour to have been executed by the hands of so feeble and effeminate a race of beings as the Aborigines of India have generally been held, and still continue to this day; and that the few figures which remain entire represent persons totally distinct in exterior from the present Hindûs, being of a gigantic size, having large prominent faces, and bearing much resemblance to the Abyssinians, who inhabit the country on the west side of the Red Sea, opposite to Arabia.

There is no tradition, says the general, of these caverns having ever been frequented by the Hindûs as places of worship; and at this period, he adds, on his own authority, that no *poojah*, or sacred adoration is ever performed in any of them, and that they are scarcely ever visited by the natives. He says that he recollects particularly the *Ragonath Row*, a Bramin versed in the archaiology of the East, when at Bombay, did not hold them in any degree of veneration; and yet an intelligent writer in the Archaiologia (vol. vii. p. 286, &c.), who visited the Cave of Elephanta in 1782, states that he was accompanied by a sagacious Bramin, a native of Benares, who, though he had never been in it before that time, recognised at once all the figures, was well acquainted with the parentage, education, and life of every deity or human personage there represented, and explained with fluency the meaning of the various symbols by which the images were distinguished. This is undoubtedly a clear proof that their mythology of the present day is not materially different from that delineated on the walls of these excavations; the most remarkable of which is at Elephanta, a small island in the harbour of Bombay. An elephant of black stone, large as the life, is seen near the landing place, and probably gave its name to the island. The cavern is about three quarters of a mile from the beach; the path leading to it passes through a valley; the hills on either side are beautifully clothed, and, except when interrupted by the tuneful notes of the birds which dwell upon the island, a solemn stillness prevails, which admirably prepares the mind for contemplating the approaching scene.

The cave is formed in a hill of stone, is about one hundred and thirty-five feet square, and nearly fifteen feet high. Its massy roof is supported by rows of columns, and are disposed with great regularity. Gigantic figures, in relief, are sculptured on the walls; which, as well as the columns, are shaped out of the solid rock by artists of some ability, and of unquestionable and astonishing perseverance.

The excavations of Salsette, which is about ten miles north of Bombay, are other astonishing specimens of the sacred architecture of ancient India. The artist employed by Governor Boon to make drawings of them, asserted that it would require the labour of forty thousand men for forty years to excavate and carve them. They are situate near to Ambola, a village about seven English miles distant from Tanna.

This excavation resembles that of Elephanta both in style, design, and execution; but being wrought in a softer rock, the sculptures are not so perfect as that, nor of another at Canara, which is situate about ten English leagues from Tanna on the north of the excavations at Ambola, a similar example of subterraneous sacred architecture. There are others in the country, but none equal in beauty to those just mentioned. Some of them are very lofty and appear from apertures in the sides, as if for floors, that they have been used for dwellings, which surmise is strengthened by the entire absence of sculpture in them.

The excavated pagoda of Indur Subha, or Sabha, is also a fine specimen of the sacred architecture of this ancient people. It is situated near Dowlatabad; in which neighbourhood is also another called the Pagoda of Paraswa Rama Saba. Dowlatabad is a fortified town in the Deccan of Hindustan, fifteen miles from Aurungabad the capital of Dowlatabad or Amednagure. They are also cut out of the natural rock, and for the space of nearly two leagues there is little else to be seen than a suc-

cession of these subterraneous pagodas in which there are thousands of figures, appearing from the style of their sculpture to have been of ancient Hindû origin.

The height of the excavated pagoda of Indur Subba is forty feet, its depth fifty-four feet, and its breadth forty-four. The height of the obelisk by the side of the pagoda is twenty-nine feet, including its pedestal and a group of human figures which is on the top. The obelisk is fluted and ornamented with some taste, and has a light appearance. On the other side is the representation of an elephant, whose back just rises above the front wall, but is without rider or ho da. The plans of these excavated temples are as regular as if they were built; and the piers, pilasters, or square columns, are equidistant and sculptured in a bold and original style. Compare the excavated temples of India with the constructed ones of Egypt, and their resemblance will be found most striking. Both these styles are evidently derived from excavations, and in both are found close intercolumniations, low and short architraves, and columns of short stature rudely sculptured. Nor is there any very apparent difference to show whether the construction be not an excavation or the excavation a construction.

Before leaving the sacred architecture of Hindustan, the beautiful and picturesque ruins of the ancient mosque of Dacca should not be omitted. This metropolis is a city of Bengal lying on the banks of the Ganges; is the third city in the province for extent and population, and has large manufactories of the finest muslins and silks. This interesting part of India was not visited by the Messrs. Daniells, nor till recently by any European artist. The striking peculiarities of this fine specimen of sacred architecture, to which my attention was first called by the beautiful engravings of the antiquities of Dacca, by Mr. Landseer, are their lightness and elegance, their square rectangular panellings, which are peculiar to these structures, their arched perforations somewhat resembling the gothic, their lofty light octangular minarets, the beautiful play of light and shade over the elevation and the elegantly proportioned cupola which crowns and finishes the whole, renders it a valuable study for the young architect, and equally interesting to the amateur and antiquary.

During the earlier period of the chronology of this section, that is about one thousand five hundred and eighty-two years before the Christian era, Cecrops left Egypt to colonize ancient Greece, where some authors assert that he built twelve cities. He taught the Greeks the art of building, and founded a city, which he named after himself Cecropia; and to put his new colony into a state of perfect security, he erected a fortress on rising ground, where they afterwards built the temple; and to about the same period is attributed the founding of Troy by Scamander.

Athens, Sparta, Cranaus, and Grecian Thebes also owe their origin to this period. Egypt was overrun by the Æthiopians, but its indestructible edifices bade defiance to the flames.

Tyre was built about the year 1060 before Christ, and a curious example of their sacred architecture is in the temple of Dagon, which the Bible represents to have been destroyed by Sampson, who pulled it down, and destroyed himself and all the people who were assembled to worship the idol and to make sport with their captive. The temple is described to have had two main pillars or columns on which it stood, and that Samson standing between the two pulled them down, and hurled the temple into inevitable destruction.

The structure of such a building has puzzled many a commentator and critic, but Sir Christopher Wren, whose learning and reading were equal to his skill in architecture and mathematics, has given so clear an elucidation, as to render its mode of construction perfectly intelligible. In considering what this fabric must be, that could at one pull be demolished, he conceived it to have been an oval amphitheatre, the scene in the middle, where a vast roof of cedar beams resting round upon the walls, centered all upon one short architrave, that united two cedar pillars in the middle; one pillar would not be sufficient to unite the ends of at least one hundred beams that tended to the centre; therefore he says there must be a short architrave resting upon two pillars, upon which all the beams tending to the centre of the amphitheatre might be supported. Now if Samson, by his miraculous strength pressing upon one of these pillars, moved it from its basis, the whole roof must of necessity fall.

Before leaving this portion of the work, a few lines must be devoted to the mausoleum or temple of Tesboo Lama at Thibet, and the temple or pagoda of Shoomadoo at Pegu, both sacred buildings of high antiquity.

The mausoleum requires no particular description, its characteristics are the most ancient and simplest Chinese, its propor-

tions in good taste, and its mode of execution excellent.

The other, which is a large and splendid conical structure, is the great temple or pagoda, called Shoomadoo Praw, situated between India and China, but partaking more of the style of the latter people than of the Hindûs. Its pyramidal shape is graceful, its apex approaches even to the elegant, and, except a tendency to the florid style, its accessories are rich and beautiful.

This singular building is called the temple of Shoomadoo, or the Golden Supreme, compounded of the Birmān word *shoo* golden, and *madoo* a corruption of the Hindû word maha deo. Its addition Praw, signifies in the Birmān language Lord, and is always annexed to the name of every sacred edifice. As a farther proof of this hypothesis of the Indian derivation from Egypt, may be added that *phra* is the proper name, under which the Egyptians first adored the sun, before it received the allegorical appellation of Osiris, or author of time.

This extraordinary sacred edifice, according to Col. Symes, who delineated and described it a few years since, is built upon a double terrace, one raised above the other. The lower and greater terrace is quadrangular, and raised about ten feet above the natural level of the ground. The upper terrace is smaller, of a like shape, and raised about twenty feet above the lower.

The length of one side of the lower terrace is about one thousand three hundred and ninety feet, and of the upper six hundred and eighty-four. These terraces are ascended by flights of stone steps, and on each side are dwellings of the Rahans or priests. The temple itself is an octangular pyramid, built of brick and fine shell mortar, without any excavation or cavity of any sort. Each side of the octagon, at the base, measures one hundred and sixty two feet. This immense breadth diminishes abruptly to a spiral top, and may not be inaptly compared in shape to a speaking trumpet.

In defining the styles which prevailed at this period of history, we should consider that the orders are not only Greek and Roman, but Phœnician, Hebrew, Egyptian, and Assyrian; therefore are founded upon the experience of all ages, promoted by the vast treasures of all the great monarchs, and skill of the greatest artists and geometricians, every one emulating each other: experiments in this kind being very expensive, and errors incorrigible, is the reason that the principles of architecture should be founded more on the study of antiquity than a dependance on fancy. Beauty, firmness, and convenience are the principles; the first two depend upon geometrical reasons of optics and statics, the third only makes variety.

Wren well observes that there are natural causes of beauty. Beauty is a harmony of objects begetting pleasure by the eye. There are two causes of beauty, natural and customary. Natural beauty arises from geometry, consisting in uniformity (that is equality) and proportion. Customary beauty is begotten by the use of our senses, to those objects which are usually pleasing to us for other causes, as familiarity or particular inclination breeds a love to things not in themselves lovely. Here lies the great occasion of errors; here is tried the architect's judgment; but always the true test is natural or geometrical beauty. (See BEAUTY.)

"Geometrical figures," he continues, "are naturally more beautiful than other irregulars; in this all consent as to a law of nature. Of geometrical figures, the square and the circle are most beautiful; next the parallelogram and the oval. Straight lines are more beautiful than curved; next to straight lines equal and geometrical flexures; an object elevated in the middle is more beautiful than if depressed." See Parentalia p. 352, and Elmes's Life of Wren.

The Egyptian, Hindû, Chinese, and other styles, having no immediate relation to the present section, the next step will be to the wisdom of the orders as practised by the Greeks. The Greek style of architecture is divided into three modes or orders; namely, the DORIC, the IONIC, and the CORINTHIAN; named from the countries which gave them birth, or are said to have been the first to use them. The sacred edifices of the Greeks are the most ancient as well as the most beautiful of all the buildings of that tasteful people that have reached our times. The great superiority of the Greeks in architecture is to be traced to causes similar to those which occasioned their preeminence in every thing else; namely, *a deep investigation into first principles, and an accurate perception of the elements of all that they attempted to execute.*

A similar investigation, and a similar perception or knowledge, and nothing else, will produce the like effects in our country and in our times. In Greece, no painter proceeded without acquiring a knowledge of anatomy and drawing. Their sculptors

carved their own marble, and their architects understood design, construction, perspective, and composition, and had a clear preconception of effect.

It has been said that the Greeks did not understand anatomy and did not dissect; that we are uncertain as to their knowledge of geometry, because Euclid, the earliest author in that science with whom we are at present acquainted, lived considerably after the construction of their best edifices, and that our certainty as to their knowledge of perspective is still less. It has also been asserted in corroboration that the Greeks had laws prohibiting dissection; therefore they did not dissect. "The exception," says the great Lord Coke, "proves the rule," therefore, even did not those sculptural wonders, which now grace our national museum, and the anatomical details which are so abundant in the poems of Homer, prove the depth of their anatomical knowledge, this very exception proves that they did dissect, and that it was necessary to enact laws against the practice. Among the most remarkable proofs of the deep knowledge of the Greeks in anatomy, the Theseus and the Ilyssus of the Elgin collection, exhibit the perfection of art, and show the most scientific research into anatomy and the natural history of man.

The divisions and subdivisions of the orders will come more appropriately in another section; therefore, we proceed to the history of sacred architecture among the Greeks.

The religion and laws of the Greeks are acknowledged to have been derived from the creeds and institutions of Egypt, and their styles of architecture, in spite of the hypotheses and splendid fables of Vitruvius, were no less adopted and improved from the same source. Herodotus assures us that the worship of the greatest part of the first gods that were adored in Greece, came from Egypt, and that all antiquity regarded the Egyptians as the first who paid a solemn and public worship to the deity, and therefore were the first inventors of sacred architecture. In this derivation he excepts only Neptune, and says farther that the worship of this deity was derived from Libya. Saturn, Jupiter, Ceres, &c. were the first gods of Greece; hence it is probable that the Titans introduced these deities, and consequently, that those princes came from Egypt; for the worship of Saturn, Jupiter, and Ceres was established, according to Diodorus, from time immemorial. The Titans also taught the Greeks the first elements of the arts and sciences, and their earliest sacred edifices were first borrowed from them.

The principal examples of sacred architecture among the Greeks are their exquisitely beautiful temples, a list of which may be found in numerous works given at the end of this article.

Cadmus, who lived about 1500 years before the Christian era, and was the grandson of Agenor, King of Tyre, brought the arts and sciences into Greece, five hundred and sixty-two years after the building of the walls of Babylon. In the part of Greece where he settled, he built a city which he named after the celebrated Thebes in Egypt, and doubtlessly imitated the Egyptian style of architecture in his earliest structures. In corroboration of this, Pliny expressly states that Dædalus, the architect of the Grecian labyrinth, imitated that of Egypt in every respect. This same Thebes afterwards became so celebrated, that Germanicus made a journey purposely to survey its magnificent ruins.

Ogyges, Inachus the first King of Argos, Cecrops, Cadmus, Lelex, and Danaus, founded successively the kingdoms of Athens, Argos, Sparta, and Thebes; but it was in the colonies of Asia Minor that sacred architecture began to exhibit its greatest splendour. The inventor of the first two Grecian orders is attributed solely to the inhabitants of these countries, as their names *Doric* and *Ionic* evidently import. The *Corinthian* did not appear in its full perfection till long after these two orders.

It seems to have been invented in Greece, properly so called, and is the richest, the most magnificent, and the most elegant of all the Grecian orders, and perhaps of any that architecture has ever invented.

The first materials used by the Greeks in their sacred buildings was timber; next brick, which they learned the art of making from the Egyptians. Stone next succeeded, as in the temple of Apollo at Delphon, built by Amphyction; and afterwards when they had accomplished the complete glories of their style, they immortalized it in marble.

The character of the genuine architecture of the Greeks, in their brightest days, the days of Pericles, Alexander, Plato, Aristotle, Apelles, Phidias, Sophocles, and Euripides, is that of an imposing grandeur united to pleasing simplicity, elegance of ornament, and harmony of proportion in an eminent degree, together with a certain relation or coincidence of parts, as necessary in works of art as in those of literature.

Sacred architecture was carried to the highest perfection by the Greeks. Indeed the greater part of their fine and pure style which has reached our times may be arranged under this class or department of civil architecture.

Besides the beautiful simplicity and elegance of style which distinguished the Greeks above all other nations, their able and sufficient style of construction is worthy of study for its simplicity and for effecting its purpose by legitimate means, although they did not aim at the arch or vault by which their successors, the Romans, so signalized themselves. And as their works surpassed all others so did the beauty and excellence of their materials.

In the time of Pericles the Athenians used Pentelican marble, and a species from Mount Hymettus in their buildings. The sort called Parian was the most admired, but it was almost exclusively appropriated to sculpture. Bronze was also occasionally used for building in some of their early structures; and Pausanias mentions several buildings of this costly material, particularly a small temple of Minerva, called on this account Chalcioecus, which was standing in his days at Lacedæmon. Stones of an almost incredible size after the manner of the Egyptians, were also amongst their earliest modes of construction, whence originated the tradition that they were the works of the Cyclops. In later periods they used stones of a smaller size, of irregular polygonal figures of four, five, and six sides, joined with the utmost care and nicety.

The walls of the ancient city of Pæstum are thus built of huge polyhædric masses. Chandler, the Grecian traveller, discovered walls of this method of construction near to Troëzene, Epidaurus, and Ephesus; and Dr. Pocock also in the island of Mytelene. See Construction.

As architecture and mechanical skill advanced they used cubical and oblong stones, with which they constructed their walls, after two methods: one called Isodomon, which as the word implies, was with courses of equal thicknesses and of equal lengths; and the other Pseudisodomon, where the heights or thicknesses and lengths of the courses differed. The first or true manner was always used in their grandest buildings as being the most beautiful, and the latter or false method where beauty of appearance was of less consequence.

Another and still inferior mode was also used by them for works of less consequence, and was called Emplecton. The front stones only in this manner of construction were wrought, and the interior was left rough and filled in with stones of various sizes or with rubble. It was principally used in walls of great thicknesses, such as those wherewith they surrounded their cities. In some instances they built their walls of brick or common stone, and faced them with marble. Cement was seldom used by the Greeks in their best works, as the size and ponderosity of the blocks, and the great exactness with which they were squared, were sufficient for solidity, and made more perfect and complete joints. (See Ætaiol.)

The ancient Greek architects were moreover very careful that every ornament or decoration which they used should always accord in character and situation with the order and the building to which they applied it; and both the order and the ornament were characteristic of the destination of the edifice: never building a prison of the Corinthian order, nor a theatre of the Doric. The external ornaments were bold, simple, and distributed with a judiciously sparing hand. The pediment of the temple and the metopes of the frieze, as in the temples of Minerva and of Theseus at Athens, and of Jupiter Panhellenius at Egina were decorated with bassi rilievi, and the angles of the walls with pilasters or antæ. The porticoes which surrounded their public squares in which they often exhibited pictures, statues, and other works of art, appear to have been more elaborately decorated than their temples, their theatres of declamation, and gymnasia; and, with regard to interior ornaments, little can be known, from the general destruction of those parts.

The Greek style of architecture may be classed under *five* different epochs, according to the historical periods which gave rise to *five* corresponding styles or modes. The *first* embraces the works of Trophonius who built the temple at Delphos, and those of Agamedes and Dædalus.

This early period of Grecian history, which may be termed the heroic age, does not furnish any remains of architecture of positive certainty. Yet those lights which are wanting from the deficiency of existing ancient ruins, are supplied in some degree by ancient writers, who, however, are not sufficiently explicit or circumstantial in those details which alone could give us the information we require.

Homer, for instance, in speaking of the palace of Priam, says that it had at the entrance fifty apartments, well built, in which the princes, his sons, lodged with

their wives, and that it was surrounded by porticoes, wrought with the greatest care. At the bottom of the court there were twelve other apartments for the sons-in-law of that monarch, and a magnificent dwelling for Paris, who is reported to have been a skilful architect. These all tend to prove that architecture was cultivated as an art in Asia Minor, although it affords us no information as to style or taste.

The *second* epoch includes from the time of Rhæcus of Samos and Theodorus, who lived about seven hundred years before the Christian era, down to the time of Pericles; in which period flourished Ctesiphon, Metagenes, Andronicus, Eupolemus, Callimachus, Libon, and other eminent and celebrated architects.

The *third* epoch is the period from Pericles to that of Alexander the Great; under the former architecture reached the summit of its perfection; a perfection of which Sir William Jones, with his accustomed truth and perspicuity, says, "In those elegant arts, which are called fine and liberal, it is really wonderful how much a single nation has excelled the whole world: I mean the ancient Greeks, whose sculpture, of which we have excellent remains both on gems and in marble, no modern tool can equal; whose architecture we can only imitate at a servile distance, but are unable to make one addition to it, without destroying its graceful simplicity; whose poetry still delights us in youth, and amuses us at a maturer age; and of whose painting and music, we have the concurrent relations of so many grave authors, that it would be strange incredulity to doubt their excellence." In this brilliant period flourished Hippodamus of Miletus, Phidias, Ictinus, and Callicrates, who were conjointly employed in the building of the great temple of Minerva at Athens, called the Parthenon.

The *fourth* great epoch is that which extends from the decease of Alexander the Great to that of Augustus. Alexandria, under the dominion of the Grecian monarchs, was the principal school of the great architects of this period, among whom Dinocrates, whose proposal of forming Mount Athos into a statue of Alexander the Great, and subsequent founding of Alexandria is celebrated by Vitruvius, and Sostrates were the most eminent.

"I cannot conceive," says Spence, in his entertaining anecdotes of the great men of his time, "how Dinocrates could ever have carried his proposal of forming Mount Athos into a statue of Alexander the Great into execution." "For my part," replied Pope, "I have long since had an idea how that might be done; and if any body would make me a present of a Welsh mountain and pay the workmen, I would undertake to see it executed. I have quite formed it, he continued, in my imagination. The figure must be in a reclining posture, because of the hollowing that would otherwise be necessary, and for the city's being in one hand. It should be a rude unequal hill, and might be helped with groves of trees for the eyebrows, and a wood for the hair. The natural green turf should be left wherever it would be necessary to represent the ground he reclines on. It should be so contrived that the true point of view should be at a considerable distance. When you were near it, it should have still the appearance of a rough mountain; but at the proper distance such a rising should be the legs, and such another an arm. It would be best if a river, or rather a lake were at the bottom of it, for the rivulet that came through his other hand, to tumble down the hill and discharge itself into it."

It is somewhat singular that Mr. Pope should have thought this mad project practicable; but it appears that there are still persons who dream of such extravagant and fruitless undertakings. Some modern Dinocrates had suggested to Buonaparte to have cut from the mountain called the Simplon, an immense colossal figure, as a sort of genius of the Alps. This was to have been of such an enormous size, that all the passengers should have passed between its legs in a zigzag direction.

During this fourth epoch are found the names of Saurus and Batrachus, who executed several works in Rome; not being allowed to inscribe on them their names, used the expedient of carving a lizard and a frog upon the pedestals as anagrams of their names, σαυρος signifying in Greek a lizard, and βατραχος, a frog. See ALLEGORY.

The *fifth* and last great epoch of Grecian architecture comprehends from the time of Augustus, in whose days Vitruvius is supposed to have flourished until the removal of the seat of Empire to Constantinople.

The pure architecture of Greece is superior to all that preceded it, and all that has been designed and executed since. Its architects and sculptors never violated the inherent properties of any object for an artificial effect; while those of Rome perpetually committed such violations, deteriorating all that they laid their hands upon. The irregular and fantastic variety of their orders proves the truth of this accusation, and powerfully opposes itself to the beau-

tiful simplicity of the Greeks. The Romans executed works containing gross infringements of the sounder laws of architectural taste, which have however obtained a general and lasting reputation.

Such is the colosseum, such is the theatre of Marcellus, such are their amphitheatres, such is the Pantheon; structures that excite wonder and seize upon our admiration, certainly not for the faults with which they abound, but in spite of them.

The architecture of the Romans undoubtedly possesses splendour, vastness of conception, a noble carelessness of expense, and a profuse redundancy of decoration in all their public buildings; which, as Quintillian observes, is more easily cured than barrenness; and if they are to be praised for their great knowledge of scientific construction, and bold command of the arch, the vault and the cupola, they most amply deserve it; but certainly they were never eminent for that purity of taste, elegance, and simplicity of invention and construction which characterize the Greeks above all others. Hence are to be found so many more models of a fine style among the Greeks than among the Romans. Give me simplicity and good design, and keep your ornaments for children.

The Romans are indebted for all the excellencies of their style of architecture to the Greeks, and its deficiencies and redundancies are all their own. Their earliest architects were all Greeks, and it was not till late in their history, that they made any figure in the arts of design. Thus all the Roman architects, with Vitruvius at their head, follow the plans that were laid down for them by the great master-spirits of Greece. They every where imitate the Greeks, and every where misrepresent them, as may be seen in comparing the Doric of the temple of Minerva Parthenon, with that of the theatre of Marcellus, the very best of the Roman specimens, and the Ionic capitals selected from Greek and Roman specimens. Compare them together and they will be found comments upon each other; the one showing the commanding excellence of purity of style, the other the glitter and frivolity of false decoration.

That which Cicero says so truly of the qualities requisite to a fine oration may as correctly be applied to the qualities necessary to a fine piece of architecture: "Let ornament," he says, "be manly and chaste without effeminate gaiety or artificial colouring; let it shine with the glow of health and strength."

Had the taste of Vitruvius been as refined and as unsophisticated as that of Cicero, the Roman purity in architecture would have been upon an equality with that of their fine and majestic language. But on the contrary we find very many of their buildings frivolously and effeminately rich in ornament, and miserably deficient in invention and good taste. For with fillets upon fillets, with bands over beads, and beads over bands, cavettos and cimas both right and reversed, with ornamented plain faces (excuse the bull), carvings, and dentels and denticles, drops and flowers and festoons, and other tawdry misplaced and misapplied ornaments; they disfigured their spoliations from the Greeks. As examples, look at any Roman specimens, particularly that of the temple of concord at Rome, and compare it with any of its lovely originals from Greece. Of these expensive barbarisms may be truly said that they are

> Of such a frightful mien,
> As to be hated need but to be seen.
>
> POPE.

Yet such things find their admirers even in our days, and we need not travel out of the metropolis to witness them. Little, however, was it to have been expected after the many introductions to this country of the pure forms and fine proportions of Greece, by Stuart, Wilkins, Cockerell, and other eminent architectural travellers, that Batty, Langley, and Borromini would in our days have driven the Athenian antiquities from our shelves, and the purity of Grecian art from our streets, and substituted imitations of the altogether inferior productions of Rome and modern Italy.

To the sacred architecture of Greece, as exhibited in their various temples, we are indebted for the purest and best canons of architecture that the world has ever seen.

The elements of this pure style are three classes or modes called orders, while those of the Roman style, its despoiling imitator, are five.

Nature dictates but three essential modes of building, which are clearly and distinctly visible in every style of their art. Namely, the *robust*, the *chaste*, and the *elegant*. Those three essentials in the art the Greeks have embodied in their Doric, their Ionic, and their Corinthian. But the Romans, restless after innovation, sighing for more worlds of art to conquer, and pining after more than all, would have one *more* robust than the robust, and one *more* elegant than the elegant. Hence their Tuscan, which is but, as a musician would say, a variation upon the theme of the Doric; and the Composite, which is any thing but an improvement upon the Corinthian.

ARCHITECTURE.

Architecture, that is to say, classical architecture is generally divided into certain modes or systems called orders, which are named from the country whence they are supposed to have been derived or invented; as the Tuscan from Tuscany, the Doric from Doria, the Ionic from Ionia, the Corinthian from Corinth, and the Composite or Roman from Rome. Now, although the preceding orders form five in number, yet three only are to be received as such, in the pure or Grecian style of architecture. The Tuscan, as I have already said and will hereafter prove when I arrive at the Roman system is merely a variation of the Doric; and the Composite a corruption of the Corinthian, and too much like it, both in essence and in character, to be distinguished by an untutored eye, or to be acknowledged a distinct genus or order by the critic.

Thomson, who may be called the poet of the fine arts, and whose taste was formed by a long residence at the seats of ancient arts, with the son of the Lord Chancellor Talbot, beautifully and characteristically depicts the three orders in his "LIBERTY." In the second part of that poem he personifies public virtue in Greece as a goddess, and the sister arts of painting, sculpture, and architecture as,

"The Graces they
To dress this sacred Venus."

And farther on he states that architecture was

"By Greece refined,
And smiling high to bright perfection brought,
Such thy sure rules, that Goths of every age,
Who scorned their aid, have only loaded earth
With laboured heavy monuments of shame,
Not these gay domes that o'er thy splendid shore
Shot all proportion up.

First, unadorned
And nobly plain, the manly Doric rose;
Th' Ionic then, with decent matron grace,
Her airy pillar heaved; luxuriant last,
The rich Corinthian spread her wanton wreath.
The whole so measured true, so lessened off
By fine proportion, that the marble pile,
Formed to repel the still or stormy waste
Of rolling ages, light as fabrics looked,
That from the magic wand aerial rise.
These were the wonders that illumined Greece
From end to end."

These orders undoubtedly derived their origin from the chance built huts and cabins of the first inhabitants of the world, and which as doubtlessly contained in themselves the constituent elements of architecture, till drawn forth by the hand and eye of taste, as the marble block contained the statue, whence Canova drew forth his shining Hebe ever young. As we cannot derive our knowledge of the origin of these elements of style from a better source than from Vitruvius, he must be our guide through this obscure path. In my description of the orders I must confine myself briefly and generally to the three classical orders of antiquity, or run the risk of exceeding the limits of this section.

Vitruvius, our best authority, indifferent as he is for historical truth, informs us that, when Dorus, the son of Helenus, and the nymph Optice reigned over Achaia and all Peloponesus, he built in the ancient city of Argos a temple to Juno, which was formed by chance of the order since called Doric. Afterwards the Athenians, according to the responses of the Delphian Apollo, by the common consent of all Greece, sent out thirteen colonies at one time into Asia, and appointing a leader to each colony, they gave the command to Ion the son of Xanthus and Creusa, whom Apollo of Delphos also acknowledged to be his son. These colonies were led into Asia by Ion, who seized upon the country of Caria, where he built the large cities of Ephesus, Miletus, Myunta, Priene, Samos, Teos, &c.

These states were called from their leader Ionia; and here they began to erect and dedicate temples to their deities; and first they built one to Apollo Panionios, in this manner in Achaia, and which they named *Doric* because they had first observed it in the Dorian states. In this temple they intended to use columns, but not knowing their symmetries, and while considering how they should proportion them so that they might support the weight, and at the same time have a graceful appearance, they measured the length of the human foot, which, as they found to be nearly the sixth part of the height of a man, they used this proportion for their columns, making the thickness of the shaft at the bottom one sixth part of the height including the capital. Thus the Doric column, having the proportions of the human body, began to be used in building with solidity and beauty.

Afterwards, being desirous of building a temple to Diana, they invented a new order on similar principles, using the proportions of a female. They made the bottom diameter the eighth part of its height, and that it might appear the more graceful, they added mouldings round its base to represent the shoe, and volutes to the capitals to imitate the twisted braids of hair falling on each side, and the cymatium and encarpæ, the locks of hair braided and arranged on each side over the forehead. They also fluted the shaft from bottom to top like the folds in the garments. Thus were the two species or

orders of columns invented; one representing the strength and simplicity of man, the other the elegance and fine proportions of woman. This latter order was called *Ionic*, says Vitruvius, because it was invented by the Ionians. But subsequent architects, who wished for lighter proportions, have often made the heights of the Doric column seven diameters, and that of the Ionic eight and a half, destroying the character and beauty of each.

The third Grecian order, which is called the *Corinthian*, is imitative of the delicacy of shape and slenderness of proportion of a young virgin. "For the limbs," says Vitruvius, "at that early age, are formed more slightly, and admit of more graceful decoration." The invention of its capital is thus related by Vitruvius.

A Corinthian virgin just marriageable, being attacked by a fatal disorder, died. After her interment her nurse collected some vases and toys, which pleased her when living, put them in a basket, and placed it on the top of her tomb, covering it, that it might endure the longer in the open air, with a tile. The basket being placed on a root of acanthus, depressed it in the middle, occasioning the leaves and stalks which grew up in the spring to encircle and twine round the basket; but being resisted by the angles of the tile, they convolved at the extremities in the form of volutes. This was seen by Callimachus, called on account of his taste and skill in sculpture Catatechnos, who, delighted with the novelty of its figure and its delicate and appropriate form, encircled by the beautiful foliage, formed from its model a new capital to some columns he had sculptured for Corinth, thus composing this most elegant and beautiful of the orders.

The above hypothesis is nothing but a splendid fable; notwithstanding Mr. Wilkins says, that of all the opinions entertained by Vitruvius on the origin of the orders of architecture, that relating to the invention of the Corinthian capital *seems* alone entitled to any attention; both because the reputed age of Callimachus, its supposed inventor, approaches within certain limits to the first recorded instances of the introduction of the order into Greece; and *because* the recital is less open to the charge of absurdity and fiction. Notwithstanding this, the account just quoted of the origin of the Doric and the Ionic is not only less open to the charge of absurdity and fiction, but may be considered as nearly historically true; while the Vitruvian hypothesis of the vase of toys, the protecting tile, and the accommodating acanthus, appears more worthy the reveries of a poet, and a fine poetical episode it certainly is, than of the historian of such an art as architecture.

The Corinthian order is clearly derived from the architecture of Egypt adapted, refined, and naturalized. First, Cecrops, the founder of Athens, was an Egyptian; next Dædalus, the earliest Athenian artist, visited Egypt to investigate and study the principles of the fine arts. Added to these facts, it is also well known that the Greeks borrowed their laws, their manners, and their customs from the Egyptians, purifying them in the alembicks of their own brighter genius.

A colony at first always imitates its mother country; and afterwards as surely does all in its power to render its origin forgotten. When we refer to examples of both styles, surely the Egyptian origin of the Corinthian capital cannot be denied. Their elements are incontestably the same, namely, a vase surrounded by flowers and covered with an abacus. The story of the Corinthian girl was probably invented by a Grecian poet, and related as authentic by Vitruvius.

Mons. Quatremere de Quincy, secretary to the French academy of arts, corroborates this opinion, and supposes even the Ionic capital also to have been borrowed from Egypt. He metamorphoses the ears of the head of Isis, in an Egyptian capital, into the Ionic volutes, the braids of hair on the forehead into the helices, or threads of the capital; the throat into the alarino, or necking, and so on.

Following this ingenious hypothesis, the Doric may also be said to have been drawn from the rude types or prefigurations of the Egyptians, which contain all the primitive elements of the beautiful examples of the Greeks. Belzoni farther corroborates it by saying, that the Isis of the Egyptians is the same personage with the Io of the Greeks; therefore capitals designed after the head of this goddess are Isislike, Iolike, or Ionic.

Referring to any of the ancient Grecian temples, it will be seen that the metopes, or spaces between the trylyphs in the entablature are filled, and sometimes with sculpture, as in the Parthenon, which were occupied by those wonderful efforts of the chisel now in the British Museum, representing battles of the Centaurs and Lapithæ. These metopes, in the earliest Greek buildings, were open, and the trylyphs

justly represented the ends of the beams of which they are the types; as the following quotation from the Iphigenia of Tauris proves. Pylades is counselling Orestes to scale the Doric temple of Diana, and says to his friend,

> "But when the eye
> Of night comes darkling on, then must we dare,
> And take the polished image from the shrine,
> Attempting all things; and the *vacant space*
> *Between the trylyphs*, mark it well, enough
> Is open to admit us; by that way
> Attempt we to descend."
>
> Iph. in Tau. Potter's Venter.

The first general division of architecture being its orders, the next division in sacred architecture is the several orders of temples or sacred edifices. The orders of sacred buildings or temples of the Greeks are seven:—first, the Antis; second, the Prostyle; third, the Amphiprostyle; fourth, the Periptoral; fifth, the Dipteral; sixth, Preudo Dipteral; and, seventh, the Hypethral.

The first order of sacred buildings, called antis, is that wherein the ends of the flank walls finish in pilasters or antæ. Of this order is Inigo Jones's fine Tuscan portico of St. Paul's Church, Covent Garden.

The second or prostyle differs from the antes by having columns in front of the pilasters or antæ; both these orders of temples have only a portico at one end.

The third or amphiprostyle order of temples is nearly the same as prostyle; but as its name imports, has a posticum or portico at the rear the same as the principal front.

The fourth order, the peripteral, has also porticoes at both ends of six columns each, and eleven, counting the angle columns at each side. It has, as its name imports, columns all round about the cell, as in the temple of Theseus, which by the way has two columns in flank more than the rules of Vitruvius prescribe.

The fifth or dipteral order, which Vitruvius places after the pseudo dipteral, is octastyle, or eight columned, like the portico of the Parthenon, but has a double row of columns all round the cell.

In the sixth, that is, the pseudo dipteral, or false dipteral, the porticoes are octastyle, or eight columned, in front, and on each side fifteen columns, including those of the angles. The Parthenon is of this order of sacred buildings, but has seventeen columns on the sides; for the ancient architects of Greece did not servilely follow every dogmatical rule of the critics, yet in their variations they never lost the true spirit of the original.

The hypæthral is the seventh order of sacred buildings, and is decastyle, or ten columned, both in front and rear; the other parts are distributed the same as in the dipteral, but it has a double row of columns in its interior, one higher than the other, continued on all sides, and resembling an interior portico. The middle part has no roof. A fine specimen of this order of temples is to be found in that of Jupiter Olympus at Athens, and in one of the three at Pæstum. In Rome there is not a single example of the hypæthral order.

Before leaving the pure sacred architecture of Greece, a short space must be devoted to that of its colonies and other distant parts.

The ancient temple at Corinth is an architectural structure of unknown antiquity. It is of the Doric order, and the proportion of its columns, from actual measurement, is shown in Aikin's Essay on the Doric Order. Its character is simple, pure, and bold, inferior to the three principal examples found at Athens, but still partaking of the purest characteristics of the order.

Among other curious and interesting ruins are the three ancient temples of Pæstum. One of them differs from every other temple in the world, having nine columns in the front, with a central range down the middle of the cell, the use of which appears to have been to support the roof.

The centre or hypæthral temple is generally supposed to have been dedicated to Neptune, the tutelary divinity of Pæstum or Possidonia. Mr. Wilkins thinks it to have been a temple of Jupiter, from its being of the hypæthral order, which is a class of building generally confined to the temples of Jupiter. Its columns possess, in common with all its other parts, the Greek character in the highest degree; and there is no doubt of its being coeval with the earliest migration of the Greeks to the south of Italy. These examples, with that of Corinth, possess the characteristic energy of the early style of the Greeks, which may be distinguished from their later and more finished style by the following definitions; namely, a shaft diminishing rapidly, and of low stature, a large and massy capital with a very bold projection of the abacus, a necking composed of three grooves, and an extremely massive entablature of nearly one half the height of the column.

The author of the Pleasures of Memory in some lines of characteristic energy,

written at Pæstum, in March 1815, says of these temples:

> "They stand between the mountains and the sea
> Awful memorials, but of whom we know not.
>
> Time was they stood along the crowded street,
> Temples of gods! and on their ample steps,
> What various habits, various tongues beset
> The brazen gates, for prayer and sacrifice!
> Time was perhaps, the third was sought for justice,
> And here the accuser stood, and there the accused;
> And here the judges sat, and heard and judged;
> All silent now! as in the ages past,
> Trodden under foot, and mingled dust with dust."

They are indeed silent yet speaking memorials of time and eternity. Of Pæstum and its twice blowing roses, what lover of poetry has not heard of those lovely flowers which

> "Now a Virgil, now an Ovid sang
> Pæstum's twice-blowing roses.

The next division of this section is the analysis of the Etruscan school of architecture; which is, however, so lost in the lapse of ages that it leaves but little room for architectural research.

The Etruscans are generally reported to have been equally distinguished in architecture as in the other arts of design. The Romans employed Etruscan architects in the building of the capitol, the temple of Jupiter, and many other large and splendid edifices. The walls of Etruscan cities were lofty and constructed of huge polyhædric masses of masonry; remains of which have been discovered at Volaterra, Cortona, Fæsula, and other parts of ancient Etruria.

The earliest temples of Etruria were small in size, being, in many instances, not able to contain more than a statue of the divinity to whom it was dedicated, and sometimes an altar.

The sacred architecture of the ancient Romans, under their kings, is undoubtedly derived from the Etruscans. This people, a colony from Greece, were antecedent to all the rest of the Italian peninsula in cultivating the arts, which they had practised even before the reputed time of Cadmus.

The natural tendency of the ancient Romans was to the grand and wonderful, the colossal, the showy, and even the prodigality of expense; hence their amphitheatres, their circuses, their temples. Of all the antique temples now remaining in Rome, the Pantheon is at once the most celebrated and the most beautiful; and may be considered the master-piece of Roman architecture, whether we estimate it as when entire, or, as at present, stripped of all its statues and other ornaments. It is supposed to have been built by Marcus Agrippa, son in law of Octavius Augustus, in his third consulship, before the Christian era, and was dedicated to Mars and Jupiter the Avenger, in memory of the victory obtained by Augustus over Marc Antony and Cleopatra; but it is more probable, as Palladio thinks, that the body of the temple was built in the time of the Republic, and that Agrippa added the portico, and perhaps some other decorations, as the double pediments seem to prove. It was repaired by Septimius Severus and Caracalla. The interior was decorated with bronze ornaments in the panelling of the cupola, and contained in niches statues of all the gods. The interior is no less fine and striking than the outside; and from its circular form is called by the Italians Rotondo; as from it containing statues of all the gods, it was named by the ancients Pantheon, from Παν and θεος. The diameter, exclusive of the large niches, is one hundred and thirty-two feet, being nearly thirty feet more than the cupola of St. Paul's, and the height from the pavement to the summit, the same as the diameter; the thickness of the walls is nineteen feet, which is relieved by the beautiful Corinthian niches now used as chapels and altars.

Among other specimens of the sacred architecture of the Romans is the temple of Concord, whose ugly capital has been before discussed; the temple of Janus and of Romulus, of the Sun and Moon, of Fortuna Virilis, Vesta, Minerva Medica, Neptune, Antoninus and Faustina, Jupiter Stator, whose beautiful entablature is so well copied in the portico of Carlton House, and the Temple of Peace. The three magnificent arches now standing of this latter edifice have been finely adopted by Sir Christopher Wren in the choir of St. Paul's Cathedral.

The declension of style from the days of Roman splendour may be witnessed in the modern Italian churches, particularly in the churches of St. John the Lateran, and St. Paul without the walls; and most of their buildings were executed from the ruins of the antique temples which they barbarously despoiled for this purpose, and when they had no longer skill to place the connecting architrave, they substituted ugly and uncharacteristic arches, as may be seen in the fine plates of it by Piranesi.

The fine, original, and striking style of sacred architecture, called Gothic, is of too much importance for a portion of so small a share of a brief work like the pre-

sent; but a short view will serve better than a total omission.

The earliest British style is called Saxon; and its elements are heavy round columns, and semicircular arches, bad resemblances of the worst Tuscan, covered with the round arch of the middle ages.

As a proof that the decline of the Roman style produced the Saxon, which was called by the monks Opus Romanum, we have only to conceive a country mason, ignorant of art, but skilful with his chisel, to have observed a composite capital of the depraved style of those of the temple of Bacchus, on the Mount Viminalis at Rome, or the Ionic capitals of the temple of Concord, or even a respectable Corinthian, and to be desired at some considerable interval of time, to carve some capitals as nearly resembling them as possible from memory. Imagine this, and it may be asked whether it be not more than probable, that they would resemble the Saxon capitals of St. Bartholomew the Great in Smithfield, or those of the crypt of Lastingham Priory. Hence we may fairly conclude that the origin of the Saxon style may be traced to the decadence of the Roman; and that the introduction of the Saracenic, Arabesque, and Grotesque styles, aided by the practical and scientific improvement of the workmen, and by the knowledge of the society of travelling architects, the early freemasons, produced that singularly romantic and beautiful style called the Gothic.

"A Doric temple differs from a Gothic cathedral," says Mr. Hazlitt, "as Sophocles does from Shakspeare." The principle of the one is simplicity and harmony, that of the other richness and power. The one relies on form and proportion, the other on quantity and variety, and prominence of parts. The one owes its charm to a certain union and regularity of feeling, the other adds to its effects from complexity and the combination of the greatest extreme. The classical appeals to sense and habit, the gothic or romantic strikes from novelty, strangeness, and contrast. Both are founded in essential and indestructible principles of human nature.

The style now before us has been sweepingly designated, as being any thing that is not Grecian; but whether this affected Antithesis proceed from humour or contempt is not certain.

Our illustrious countryman Wren, whose mechanical and mathematical skill elevates him above all modern architects, called this fine style a gross concamceration of heavy melancholy and monkish piles. Now it certainly is the very reverse of this definition, and is not quite so much opposed to Grecian art as was thought by the professor before quoted; but on the contrary is a style of architecture pure, grand, impressive, and characteristic. The elements of it are spires, pinnacles, lofty pointed or lancet shaped windows, and *elevation* as opposed to the *horizontal* line of the Greeks. Its character somewhat resembles that of the old German school of painting; and a fine Gothic building, with its elaborate and carefully marked details, its gaudy colours, its vermilion, and its leaf gold, reminds one of Albert Durer and his hard but correct school.

England is the classic soil for this style of architecture, as ancient Greece is for that of the orders; and here the student must come to measure and to study it. York Minster is the Parthenon of Gothic architecture, Westminster Abbey the Theseum, and the Chapel or Mausoleum of Henry VII. the choragic monument of Lysicrates. Among the finest specimens is the venerable Abbey Church of St. Alban in Hertfordshire, which is also one of the most valuable documents in the archaiological history of the country.

Gothic architecture disdains the trammels and the systems of the schools; nevertheless it has its own laws, its genera, and its species, although they have not yet been arranged in a grammatical form. Batty Langley endeavoured, it is true, to reduce it to a system, and to engraft on it the five orders of the Palladian school, instead of a more natural and philosophical arrangement; but his efforts were altogether vain and nugatory.

III. Domestic Architecture, perhaps the most interesting department of the art, is indigenous to every country where human reason has in any degree manifested or developed itself. Like all the productions of nature, architecture assumes different forms, according to the properties of the climate, the wants it may superinduce, the quality of the soil, the building materials, and the personal character of the human beings composing the various nations which practise it.

The first dwellings of the most ancient inhabitants of the earth, were doubtless movable huts or tents, in the manner of the modern Arabs and Tartars. Uninstructed nature first demands personal clothing; next a shelter from the perturbed elements; then a store for housed provisions, clothing, and other necessaries against winter and inclement seasons. The first demand will introduce mere drapery;

the second a hut or cabin, at first movable, next stationary, then secure, and afterwards improved and embellished as security increased.

Domestic architecture is a portion of the art which comes home to every man's business and bosom. "Every man's proper mansion, house, and home," says Sir Henry Wotton, "being the theatre of his hospitality, the seat of self fruition, the comfortablest part of his own life, the noblest of his son's inheritance, a kind of private princedom; nay, to the possessors thereof, an epitome of the whole world; may well deserve by these attributes, according to the degree of the master, to be decently and delightfully adorned." It is, therefore, no mean part of the art, although it has been seldom so much studied and cultivated as it deserves.

The first buildings recorded both in the Bible and in the earliest historians are of the simplest forms, materials, and design, and only fitted to keep the humble minded inhabitants from the severity of the weather. The primeval dwelling was either a natural cavern, or the simplest contrivance against the asperity of the weather.

The Egyptians are among the first who built solidly and well; and their domestic architecture, as displayed in the palatial style, is described by ancient writers as being magnificent, costly, and splendid.

The earliest dwellings were originally simple huts or cabins to protect the inhabitants from the weather; who then began to coalesce into cities, hamlets, and other congregations for safety and association. The wall and gates next succeeded, and security giving birth to luxury, added to the single living or sleeping room a second and a third, as the wants and the refinements of the inhabitants required. The separation of the elder from the younger, the males from the females, the married from the single, and other necessary consequences of an increase of civilization and refinement, all added to the increase in size and improved convenience of the primeval dwelling. These are the origins of the parlour, the eating room, the kitchen, the chamber, and the hall.

More solid materials, more elegance, more convenience were soon added to the original cabin, as men advanced in refinement and civilization, and became more convinced of security, and felt the desire of possessing their own, their private home.

Egypt is undoubtedly the first country where stone was used in domestic architecture, unless, perhaps, Babylon may be considered its rival, either chronologically or in splendour. Egypt abounded more in stone than in timber, and its inhabitants have proved themselves to be among the ablest workers in that material, which the world has ever produced.

Of the early and private domestic architecture of the Egyptians, we have not many or sure grounds; but their immense palace or congeries of palaces, called the Labyrinth, which the Greeks imitated in their no less celebrated Labyrinth at Crete, by Dædalus, proves them to have advanced in the palatial style of domestic architecture to as great a perfection of splendour as they had in the sacred styles.

It has been doubted whether any ruins of this wonderful structure have ever been discovered; but Captain Wilford, an enterprising searcher into antiquities, asserts, in a very able paper in the Asiatic Researches, that its ruins are still to be seen near the Lake Mœris, at a place which the Arabs have named the Kasi, or Palace of Karan, whom they suppose to have been the richest of mortals. We must, however, rely upon the credit of ancient authors for an account of it; and the authority of Herodotus is undoubtedly the best we can refer to on this head. There is great diversity of opinion upon the exact period to which this much boasted edifice should be assigned. Herodotus (lib. ii. n. 148) attributes its construction to the twelve kings who reigned in Egypt at the same time, about six hundred and eighty years before the Christian era. Pomponius Mela agrees in most points with Herodotus; and from these two authors we may gather a tolerably clear idea of this great example of the palatial domestic architecture of Egypt.

Herodotus, who had visited and examined this edifice with great attention, affirms that it surpassed every thing that he had conceived of it. Within one and the same circuit of walls, it contained twelve magnificent palaces, regularly disposed, and communicating with each other. Each of these palaces contained three thousand halls, twelve of which were of a particular form and beauty. Half of these halls or chambers were interspersed with terraces, and were arranged round the twelve principal halls, communicating with each other, but by so many turns and windings, that, without an experienced guide, it was impossible to escape wandering; the other half were underground,

cut out of the rock, and were said to have been used for the sepulchre of their kings. Herodotus assures us, that he visited all the apartments above ground; but those which were subterraneous, they would not, from motives of superstition, permit him to enter. Captain Wilford thinks that the various apartments under ground had been used for depositing the chests or coffins of the sacred crocodiles, called Sukhus or Sukkis in old Egyptian, and Soukh to this day in the Coptic or vernacular language of Egypt. The halls had an equal number of doors, six opening to the north, and six to the south; and at each angle of the external walls of this labyrinth was erected an immense pyramid, for the sepulchres of its founders. The whole of the labyrinth, walls, floors, and ceilings, were of white marble, and exhibited a profusion of sculpture. Each of the before mentioned twelve halls, or galleries, were supported on columns of the same sort of marble. This splendid palace, or rather city of palaces, is also mentioned by Diodorus Siculus, who thinks it was a magnificent cemetery for the Egyptian monarchs and their families; and it is also described by Strabo and Pliny, who confirm the accounts and descriptions of Herodotus.

Among other splendid examples of the palatial style of domestic architecture of this wonder-working people, are the magnificent palace of Memnon, in the Thebais or Upper Egypt, which, according to Strabo, stood in the splendid city of Abydus, the second in Egypt after Thebes; and the celebrated palace of the Ptolemies, under whom the national style of architecture experienced a complete change, and aimed at the superior graces of the Greek style.

The vast and splendid city of Thebes is celebrated by ancient writers for the beauty and splendour of its domestic architecture, as well as for its great perfection in sacred, monumental, and defensive architecture. This style, domestic art, must have arrived to a high degree of perfection among the Thebans; for Diodorus says, that the houses of the private citizens in Thebes were of four and five stories in height; which proves their knowledge of floors, stairs, and the other necessary mechanism of storied dwellings. Of an antiquity nearly as remote as these splendid examples of the Egyptian kings is the celebrated palace of Solomon, who proposed to construct the most magnificent temple and the most splendid palace that had yet been seen. Although a very able cotemporary (Mr. Wilkins) has endeavoured to convert the temple of Solomon to a Grecian temple of the pure Doric order, there can be no question that the style of architecture, both of the temple and of the palace of Solomon, was strictly Egyptian in every particular but in its materials. The ancient historian who records the chronicles of the Jewish kings assures us that Phœnicia produced the most skilful artisans in wood, or as our translation renders it, hewers of wood, and were probably skilful carpenters, joiners, carvers, and such like. A supply of these able workmen and materials of all descriptions were sent from Tyre to Jerusalem to build this palace, which was also designed by Phœnician or Tyrian architects. In corroboration of the opinion that the style of the architecture of this palace was the same as the Egyptian, it should be remembered that Solomon married the king of Egypt's daughter, and built it for her accommodation and in her honour. The artists of Phenicia were then the most skilful of their day; and much of the work was executed in their own country, and sent over to Judea for constructing these edifices. This palace was thirteen years (1 Kings, vii.) in building, and is described to have been built of hewn stones, of beams, and of columns of cedar wood, with spacious windows, porticoes, and porches. In one of which he constructed a lofty throne whereon he sat to administer justice to the people. The description of this magnificent palace, and of the columns of wrought and cast brass, executed by Hiram the architect, in the first book of Kings, is worth referring to, in corroboration of the perfection to which domestic architecture and, in fact, all the other arts had reached in this period of ancient history.

In these early ages, as well as those so beautifully described in Homer, the patriarchal form of government was so prevalent that the palaces of princes were used for every ordinary public use, and they seem to have been the only buildings dedicated to public purposes. The royal palace of Troy is described by Homer as very spacious; the material, stone artfully wrought; the apartments numerous. But we have no accounts of the detail.

The walls of Troy are celebrated as having been the works of gods; which fable proves nothing but that neither the Greeks nor the Trojans of those days excelled in such works, which had been raised, like the temple and palace of Solomon, by foreign artists. The Israelites before Solomon and

the Greeks in Homer's time seem to have made about equal progress in domestic architecture.

Among various ancient specimens of domestic architecture of Eastern nations, is the ruins of the beautiful stone building at Delhi, called the Shikargah or hunting palace of Feeroz Shah. The lofty pillar of a single stone upon its summit is called the lat, or walking staff of the same monarch. From a translation made by Colonel Follien of its inscriptions, it would appear as old as the year 97 of the Christian era, but from another version made by Mr. Henry Colebrooke (who is celebrated as a Sanscrit scholar for his translation of the digest of the Hindù law, compiled under the superintendence of Sir William Jones), it is made much later (1164). One date may, however, refer to the pillar and the other to the building.

The Feeroz Shah, whose name is attached to the building, which is acknowledged to be a very ancient Hindù monument, appears from Ferishtuh's history to have reigned at Delhi between the years 1351 and 1388, in the last of which he died, at the age of ninety; and this historian, according to his translator Colonel Dow, gives him the following character: that "though no great warrior in the field, he was by his excellent qualities well calculated for a reign of peace." He reigned thirty-eight years and nine months, and left many memorials of his magnificence in the land. He built fifty great sluices, forty mosques, thirty schools, twenty caravanseras, a hundred palaces, five hospitals, a hundred tombs, ten baths, ten spires, one hundred and fifty wells or public fountains, a hundred bridges, and the pleasure gardens he made were without number.

Mohammed Ameen Rasee, a native historian, who wrote a history of the world in the reign of Akbar, affirms that this palace was a hunting place of Feeroz Shah. It is a building of three stories, in the centre of which is a column of red stone of a single piece, round which are engraved several inscriptions of a character which has hitherto remained undeciphered. The historian says only one third of this column is visible, and that the remaining two thirds are concealed by the ruins. Its length or rather height above the roof is thirty-seven feet, and its circumference, as measured by Captain Hoares Moonshee, Mohammed Morad, ten feet four inches; some authors say that the column is a monument of renown to the Rajahs or princes of Hindustan, and that Feeroz Shah erected the building on which it stands for a menagerie and aviary, as an atonement for the severities which he practised on the inhabitants of Cumassa. It is a beautiful remain of ancient Hindù domestic architecture, and is agreeably varied in its several stories for effect of light and shade. When perfect, with its verandas and porticoes, it must have presented a very graceful and elegant appearance. Other specimens of the domestic architecture of this people are the palace of Gazipoor, Oude, &c. &c.

The Phœnician artists who executed the palace and temple of Solomon are generally supposed to be those descendants of Noah, who settled on the coast of Palestine, and are the same people who are spoken of in the Old Testament as Canaanites, a word signifying merchants, and were afterwards called by the Greeks Phœnician. Sidon their capital, so often spoken of by Homer, which was afterwards eclipsed by its own colony Tyre, was founded by Sidon the eldest son of Canaan. Inhabiting a barren country, they applied themselves to commerce and the arts, and were distinguished for their excellence in manufactures and works of taste. Their first settlements were in the isles of Cyprus and Rhodes, and they passed successively into Greece, Sicily, and Sardinia; afterwards into Gaul, and always advancing, discovered the southern and western coasts of Spain, and lastly Britain. It is even thought that the isles of Cassiterides, whence they obtained their tin, were the Solingues and part of Cornwall. Of their beautiful city Tyre, the twenty-seventh and twenty-eighth chapters of Ezekiel give a grand and poetical description; describing it as of perfect beauty, situate in the midst of the sea. Its public and private buildings and fortifications were of great extent; "the men of Arvad with thine army," says the writer, "were upon thy walls, and the Gammadims were in thy towers; they hanged their shields upon thy walls round about." The whole of the two chapters are worthy of reference for their striking descriptions.

The Phœnicians built several cities distinguished for the magnificence of their domestic architecture, their wealth, manufactures, and extended commerce. Among the principal were Joppa, Damascus, and Baalbeck. Herodotus mentions among other celebrated Phœnician structures a splendid temple dedicated to Hercules at Tyre; and Hiram, King of Tyre, the friend and ally of Solomon and the patron of Hiram the great architect, is mentioned as the founder of many palaces and cities.

It is probable that the style of Phœnician architecture differed from that of other contemporary nations, as Strabo, in speaking of Tyrus and Aradus, two islands in the Persian Gulf, says they had temples (and other structures) resembling those of the Phœnicians.

It has been conjectured, and with much probability, that the Phœnician architects constructed the principal part of their edifices with timber, as Mount Lebanus supplied them with great quantities, and its cedar is much celebrated: and from what we can learn of the construction of the palaces and other buildings of Solomon by Phœnician architects and workmen, much timber was used in its erection.

Of the domestic architecture of the Chinese, both ancient and modern, for they scarcely differ, little need be said. Tents and pavilions were the original types of its style, and appear to have served as models of design to this extraordinary people. From this origin arises its essential character, lightness; and its essential defects, weakness and bad taste. The materials principally used by the Chinese are wood of different sorts, bricks and tiles burned in the sun. Marble and stone are not often used, which may perhaps be attributed to their climate. The heat and humidity of the southern provinces render it extremely unhealthy to reside in houses built of stone; and, according to the missionaries who were at Pekin, they would in the northern provinces be uninhabitable for more than half the year. The general style of Chinese architecture cannot but be familiar to any one who has ever drunk from a China tea-cup, or who has seen many of the signs of our grocers' shops, Sir William Chambers's pagoda in Kew Gardens, or the Pavilion at Brighton.

The Chinese are governed more by the laws of their police than by either theory or good taste in their domestic architecture. These laws prescribe with the greatest accuracy how the *lou* or palace should be built of a prince of the first, second, or third order of the imperial family; of a grandee of the empire, or of a mandarine; and they regulate, like our building act of parliament, the public edifices of the capital, and of provincial edifices, cities, and towns, according to their several ranks or grades in the empire. According to these laws, which are said to be very ancient, the number of courts, the dimensions of the terraces, the length of the buildings, and the height of the roofs are ordered by progressive degrees of increase, from the simple citizen to the man of letters; from the man of letters to the mandarine, from the mandarine to the prince, and from the prince to the emperor himself.

All these measurements are fixed to within a few inches; and these laws have of course produced a uniformity in the houses of individuals; and after the gradation prescribed among all buildings, it is not astonishing that the common houses are but merely huts of a single floor; but the climate may also prevent them building of many stones. Their plan is also as uniform as their elevation, more than half the ground-floor is occupied by courts and passages. The fronts of Chinese dwelling houses next the street have no windows, except when the building is used for a shop. There is but one opening, namely the door, before which they hang a mat or place a screen to prevent the passers by from looking it. The form of the Chinese roof is characteristic of their style, always producing the idea of the tent or pavilion, as the primeval type of their architecture.

In the domestic architecture of the Chinese are often found doors of a circular form at the top, approaching somewhat to the idea of the arch; but resembling more the door of a bird cage than that of the entrance of a dwelling house. The palaces of China, especially those of the emperor, are distinguished by their vast extent, by the number of large courts, turnings, galleries, porticoes, halls, &c. of which they are composed.

Some of their public buildings are of a more substantial and durable nature than their domestic architecture; but there is nothing in their style, even after attentively perusing the best European Chinese critic and architect, Sir William Chambers, and inspecting the best designs both executed and on paper, to commend either on the score of propriety, beauty, or good taste.

The domestic architecture of the Greeks cannot be accurately ascertained; but that of the Romans can be well gathered from some of their ruins, and the relations of their authors. The palaces and dwelling houses of the ancient Romans were in a profuse style of grandeur and superb decoration. Their villas, baths, and town houses were of vast extent, and embraced every luxury that domestic architecture could demand, aided by painting, sculpture, and all the arts of design and decoration.

Among their most splendid and costly examples of domestic architecture were their baths, their theatres, and their amphitheatres. In the latter description of building they aimed so much at prodi-

gality that the relations of their most authentic writers almost appear fabulous; as, the account of the temporary theatre of Marcus Scaurus, erected while he was edile, which he embellished with three hundred and sixty marble columns, and three thousand bronze statues. It was capable of holding eighty thousand persons. The shafts of the lower range of columns were thirty-eight feet long, and their weight so great that Scaurus was obliged to give security for the reparation of the great sewers over which they were to pass, if they should be damaged by their conveyance: and this, we should remember, was only for an occasional temporary amusement.

Such, also, in character was the timber edifice, erected by Curio, for the celebration of the funeral games in honour of his father; which was so contrived as to form, according to the nature of the exhibition, either a theatre or an amphitheatre. When to be used in the former manner, the circular backs were placed against each other, thus becoming two separate theatres; so that the declamations, music, and applauding acclamations of the one were not heard in the other. After the theatrical performances were concluded, the two edifices, turning on pivots, were rolled round by machinery, with all the audience within them, and the circle or amphitheatre was completed: the pit, cleared of the populace, forming the arena.

The splendour of the baths of the Romans were equal to their other structures. Ammianus Marcellinus describes them of immense size. Some idea of their splendour may be gathered from the ruins of the baths of Titus, and from the Pantheon; which Cameron, in his dissertation on the baths of the ancients, says was only a vestibule to the vast and magnificent baths of Agrippa, who is the reputed founder of its fine portico.

Before the introduction of pure taste and the importation of Grecian arts and artists into Rome, we have the authority of all historians to prove that its architecture was as rude as that of any people of antiquity. Their Etruscan neighbours led them to copy Greek originals; and one of their earliest kings, Tarquinius Priscus, was a native of Greece. Hence the origin of the Roman style. Nor was it the architecture of Greece alone that the Romans imitated; but also their literature, their eloquence, their manners and customs were all borrowed from their illustrious predecessors. Vitruvius founded his code of architectural laws upon those of the Greeks; Virgil imitated Homer; Cicero Demosthenes; the early Roman plays were translations from the Greek, and their later ones imitations.

The elements, or constituent parts of Roman architecture, like those of the Grecian, are the orders; which consist in the style now before us of five, as the Grecian does of three; and are named the Tuscan, the Doric, the Ionic, the Corinthian, and the Composite.

Before describing the elementary principles of Roman architecture, it may, perhaps, be necessary to define the primary constituent parts of an order.

Every order is divided into two great or principal parts, viz. the column and the entablature, which again have their separate and several subdivisions: First, the column, which is in general divided into three equal parts, the base, the shaft, and the capital; except the Doric, which has no base. The base is the lowest part of the column, being that collection of mouldings which project all round and encircle the bottom of the shaft. The shaft is the frustum of a cone, and is that plain or fluted part of the column which is situate between the base and the capital. The capital is the ornamental part, which crowns or finishes the upper part of the column, and differs in the various orders, as will be hereafter described. The capital is as useful as it is ornamental, embellishing the upper part of the column, while at the same time it prevents its angles from being fractured, and the architrave from being damaged. Thus far, the column or first grand division of an order. The next grand division is the entablature, or horizontal part of the order, which is supported by the column. This is also divided into three principal parts, namely, the architrave, the frieze, and the cornice. The architrave is the undermost division of the entablature, and is composed of one or more faces, according to the order, and is capped with a simple or compound moulding. The frieze is the part comprised between the upper surface of the architrave and the under side of the cornice: it is sometimes plain and sometimes embellished with sculptures and inscriptions. The cornice is that assemblage of mouldings which crowns the entablature from the frieze upwards, and is divided into simple and compound mouldings, plain faces, &c. &c. according to the order.

The Tuscan order, the first in rotation according to the Roman system is, as may be perceived by inspection, and comparison

of its component elements, almost the same as the Doric, and is evidently derived from it. Having no complete example remaining of this order, all that we at present know of its use among the ancients is from the descriptions of Vitruvius, whose authority is the only rule for those who wish to use it; yet the Doric, divested of a few mouldings and its trylyphs, and of a small portion of its height, will answer every purpose for which the Tuscan can be required. As an historical evidence alone is it valuable.

The purest specimen of this order in England, and perhaps in the world, is the church of St. Paul, Covent Garden, by Inigo Jones, which some critics have cried up as a prodigy of art, while others have debased it to a merely decorative barn. The truth, however, as is generally the case, lies midway; for it is unique in itself, a very fine specimen of the order, and reflects credit both on its architect and his patron, the illustrious predecessor of the Duke of Bedford.

This order, as described by Vitruvius, and as practised by our able countryman, Inigo Jones, with its great projection of the crown members over the long cantilivers or trusses, may be applied with the greatest propriety to market places. The simplicity of its elements, and the extraordinary projection of its cornice, rendering it peculiarly suitable to such purposes.

Palladio asserts, that he found some ancient remains of this order in Italy, and gives an example restored from the fragments; but it is so different from that described by Vitruvius, that it is not so much a genuine Tuscan as a fancy order, founded upon a spoliation of the Doric.

Scamozzi, and other Italian architects have also tried their hands on a Tuscan order, but with little success. Their abortions may be found in Evelyn's parallel.

The next Roman order is their Doric, which has been so altered and abused by various architects since the decline of Grecian purity, that some examples hardly appear to belong to the same order: for instance, compare the portico of the church of St. Leonard, Shoreditch, by the late Mr. Dance, the finest example of the Roman Doric in England, with that of the portico of Covent Garden Theatre, the finest of the Greek we have, notwithstanding its grievous misapplication, and it will require no prophet to predict the result in the mind of any man of taste.

This order is by Palladio restored and compounded from all the best antique specimens found by him in Rome and other parts of Italy. His column is purer in style than any single ancient remain; and, indeed, has been elevated to the rank of a canon of the order. Let us, however, offer it to the test of criticism, and try how it will bear it. The bed moulding, or under part of the cornice, is too complex and enriched for the simplicity and manly character of the order. The frieze is divided, as he found the best remains in ancient Rome, and the tryglyphs are consequently misdivided. The frieze has two faces, and the whole entablature is too small for its height. In its detail it is no less faulty; the capital is overloaded with ornament, the abacus is destroyed by the addition of mouldings, the echinus is converted into a quadrant, the annulets are stuck out of sight, and the graceful channelling of the Greek hypotrachelian is omitted, to make room for a clumsy necking, which he calls coloreno, belonging to any order but the Doric. He has also added a base to the shaft, and omitted the beautiful mutules which support the corona over every triglyph and metope of the Greek original.

The next order in the Roman system is their Ionic, which differs almost as much in its essentials and detail as the rival Dorics, as may be seen in the comparative view of two of the best specimens. In its leading character of the column, its volutes, it has not, however, been so much violated as the Doric. The specimens from the temples of Manly Fortune at Rome, and of Minerva at Athens, are fair examples of each, and the difference is palpable. Compare the two, and let every person of taste judge for himself. Look at the small size of the volutes in the one, coming down scarcely below the sculptured echinus, which is as high as the first spiral of the volute, by which means the entire of the beautiful hem, which hangs so gracefully pendent over the Greek examples, is omitted. Its abacus is altered from a simple to a compound moulding. Yet the builder of Waterloo Place, in front of the king's palace of Carlton House, with Mr. Holland's tasteful Greek screen in his eye, has rejected the orthodoxy of the one for the heresy of the other.

One more example of this order after the manner of the Romans needs be cited, the very singular one of the Temple of Concord; which, it is wonderful, has not yet been introduced in New London. The cornice has mutules, or modillons, like the Doric; dentels like the Ionic; and three faces to the frieze like the Corinthian; thus stealing from all its neighbours. The capital has angular volutes,

and an angular abacus like the Corinthian, and a row of leaves like no legitimate order whatever.

Such are the leading features and characteristics of the Roman Ionic order; and it remains for the student to inquire from which source, Roman or Greek, he can draw the most graceful proportions of this beautiful and useful order. In the Roman specimens, their overloaded cornices, their ill proportioned entablature, their vulgar profiles, and the broken spiral lines of their volutes, render them, in my opinion, utterly unfit for models.

There is little in the Roman specimens of the Ionic order to entitle it to consideration, till the time of the compositions of Palladio, Scamozzi, Alberti, Serlio, De Lorme, and others of that school, which are certainly in better taste, as they approach more nearly to the legitimate standard of the order.

The next step in the Roman system of the orders is to the CORINTHIAN.

The origin and description of this splendid order are well known: and the principal examples, now remaining in Italy and Greece, do not differ so much as in the other orders.

The Corinthian orders, as exemplified in the portico of the building called the Pantheon, although rather coy in ornament, is of beautiful proportions, is chaste, correct, and a good model for imitation. The entablature bears a just proportion to the column; the architrave, frieze, and cornice are in perfect harmony with each other; and the ornaments, though sparingly, are judiciously introduced. Sir Christopher Wren has used it with great judgment in the lower order of the cathedral of St. Paul; and Mr. Hardwick, in the portico of St. Mary-le-bone Church, in the New Road. Both these architects, however, might have carved the dentel face of the bed mould into dentels, without violating the character of their order. Particularly the latter, whose portico facing the North, receives only the declining rays of the sun, which, entering the bed mould, makes this member appear like a second corona, and destroys the harmony of its light and shade, producing spottiness rather than breadth. In St. Paul's the shade is deeper, and the defect not so conspicuous, particularly since the friendly soot of the city has formed an artificial shade over the portion complained of.

Among other fine antique specimens of this order found in Rome are the beautiful columns of the Campo Vaccino, supposed to be the remains of the Temple of Jupiter Stator.

The capital and entablature of this temple have been judiciously adapted, by Mr. Holland, to the portico of his Majesty's palace of Carlton House; and a complete set of moulds and casts from them are also in the museum of Mr. Jos. Gwilt.

There only remains one more of the Roman order of columns, the COMPOSITE, which is the fifth and last in the Roman system. It proves the restless desire which that ambitious and innovating people had of converting to their own use the materials, the arts, the sciences, and the custom of the countries whose people they vanquished in arms.

This order is evidently derived from those of the Ionic and Corinthian, but can in no case be applied with superior effect to the latter. It was first used by the Romans in the triumphal arches, which they erected to show to posterity their dominion over the conquered provinces. Of this order there are many existing antique remains; but the best is that of the arch of Titus, fine casts of every part of which have recently arrived in this country to enrich the museum of the gentleman before alluded to as possessing the casts from the Campo Vaccino and Tivoli. This triumphal arch, as mentioned in the section on Monumental Architecture, was erected by the senate and people of Rome in honour of Titus after his conquest of Jerusalem. This example may be selected as a very proper model of the order, and was used by Sir Christopher Wren in the upper order of St. Paul's. It is no less well employed by Inogo Jones in the upper story of Whitehall Chapel. The appearance of these examples are grand, imposing, and picturesque; but differs only in its capital, and greater height of shaft from the Corinthian.

The constituent elements of the two leading or classical systems of domestic civil architecture, the Grecian and the Roman, having been described; a few specimens of DOMESTIC ARCHITECTURE of more recent date, and some examples, though not strictly domestic, yet more so than either sacred or monumental, will come in appropriately in this place.

Among these are the aquæducts of the Romans, which are, as their name imports channels or ducts for the conveyance of water. They were named either from the place whence the waters were brought, or from the name of its founder, joined to the word aqua or water. See AQUÆDUCT.

The ruins of a large edifice on the high grounds of Baia near Naples, so celebrated by all the Roman writers; those of Hadrian's villa at Tivoli, and in fact all that remains are proofs of the superlative grandeur of the Romans in their domestic style of architecture.

Our next step will be to some of the modern villas of Italy and France. The Italian style, as may be seen in the best Palladian specimens, aims at shade, at excluding the sun, and even the air; and the French style the direct opposite, being that of nearly all windows. The Palladian style has wide piers, small openings, and is more retired, private, and plain than the French, as may be seen in any of their palaces, particularly in the Château de Richelieu, which is by no means selected for a contrast, but is a common specimen of their domestic architecture.

The style of the earlier part of this period, in various parts of the continent, was debased by the pictorial vagaries of Borromini, Michel Angiolo, Bernini, and Raffaelle; whose twisted columns were better suited to accommodate, by their waving lines, the composition of his celebrated cartoon of the beautiful gate than to adorn or support a portico. His relation Bramante was little better; together with the fantastic Borromini, whose vagaries in the church of St. Giovanni Lateruni before alluded to in the section on Sacred Architecture, with his compound pediments, his grottesque columns, cartouches, scrolls, &c. are huddled together in that expensive and tasteless compound of absurdity and deformity.

The character of this period was a conceited affectation of novelty and invention; adding embellishments to the already embellished ancient Roman style, decorating the shafts of the columns, with blocks and bossages; inventing grottesque orders, twisted and double shafted columns, entablatures without friezes, friezes without architraves, and architraves without friezes: all used and omitted by turns. Dorics with Corinthian foliage to their capitals and bases; Corinthian with Doric triglyphs; and arches springing from columns, as in the church of St. Paul, without the walls at Rome, the fine marble columns of which were stolen from the mausoleum of Hadrian, and which the tasteless appropriators had not the ability to cover with architraves.

This is but one of the many errors which have arisen from the beautiful invention of the arch. Many imitations of these tasteless innovations have sprung up in our metropolis, and are daily excluding the classical introductions of Wyatt, Stuart, Chambers, and Revett.

Before concluding this section, the domestic architecture of the ancients must be farther considered.

No two things in the subject before us present a greater contrast than the domestic architecture of the Greeks and Romans. The passion for architecture among the Greeks vented itself in public buildings alone, while that of the Romans was as profuse in the one as in the other. The stern public spirit of the Greeks would not suffer one of their chief magistrates to boast of a structure worthy the name of a *palace*. The far famed city of Athens has been well characterized in the Quarterly Review, as possessing national edifices surpassingly magnificent, and private ones despicably mean; temples and statues in profusion, and no supply of one of the most necessary conveniences of common life, *water:* porticoes crowded with paintings, and a stream which the citizens were obliged to wade through for want of a bridge. Exterior modesty by the way was esteemed a primary virtue among the ancient Greeks.

A contrary feeling pervaded the Romans, even in the sternest days of their republic, when every man vied with another in the magnificence of his villa or palace. Pompey had a palace of superlative grandeur. The villa of Caius Marius at Misenum was so vast and grand that the republican spirit of his contemporaries began to feel offended; and yet that of Lucullus, afterwards built on the same site, left the former in comparison a mere cabin. Pliny informs us that there were at one time in Rome above a hundred palaces, the habitations of private individuals, equal in splendour to that of Lepidus in its first state, which covered the ground occupied by a hundred ordinary houses.

As a single example of the extent of Roman magnificence in domestic architecture, a brief description of the celebrated edifice of Hadrian at Tivoli near Rome, known to antiquaries by the name of Hadrian's Villa, of which the circuit was nearly ten Italian miles, may be quoted. To form an idea of the immensity of this imperial villa we must imagine to ourselves a town or rather a city composed of temples, palestiæ, gymnasiæ, baths, pleasure houses, lodgings for officers, friends, slaves and soldiers, and an infinity of other buildings both of utility and for show. The theatre is still partly

remaining as a witness of its former splendour. In this villa Hadrian imitated with much good taste all the best buildings of Greece; such as the Lyceum, the Academy, the Prytaneum, the Portico, the beautiful temple at Thessaly, and the Poihile or painted portico at Athens. He had also, among the gardens and pleasure grounds, representations of the Elysian fields and of the realms of Pluto.

The statues and other remains of ancient sculpture, which have been discovered among the ruins of this mass, during the last two hundred and fifty years, have enriched all the cabinets in Europe, and there are considerable excavations yet to be made. This villa of Hadrian appears from all descriptions to have excelled even the splendour of Asiatic magnificence. The liberality of the emperor to the cities of Greece, which were reviving in his time, and particularly towards Athens, induced the Athenians to name after him the new part of their city Hadrianopolis.

At this juncture the Greek style of architecture was thoroughly understood by the Romans, and was employed by them with more chasteness than in any other period of their history, the florid style of decoration being mostly confined to the interior of their buildings. This epoch of Roman architecture being thus the most pure and important, the following summary may be useful as a recapitulation of its leading features.

After the burning of Rome, in the reign of the Emperor Nero, he employed the architects Celer and Severus, in the rebuilding of several edifices, and principally his golden palace, which surpassed in richness and decoration all that had previously been constructed. Infinite decoration and crowded ornament flourished; and true taste in architecture declined till the time of Vespasian, when a better style began to prevail. The purest days in architecture and the other arts among the Romans were from the time of Augustus to that of Hadrian; they retrograded a little to that of Septimius Severus, but from his time the declination became rapid and decisive.

Domestic Architecture *in England.* In considering the early domestic architecture of this country, we must revert to times, the history of which is almost fabulous, to seek its origin. During that early period of our history which is before the Roman invasion, our ancestors appear to have had scarcely any other dwellings than thickets, dens, and caverns; and according to Tacitus and Cæsar, they could have been little better in point of civilization than many of the recently discovered inhabitants of the South Seas. Examples of their ancient caverns are still to be seen in the western isles of Scotland, and in parts of Cornwall. In some parts of southern England, however, particularly in Kent, the inhabitants appear to have acquired a sufficient knowledge to build houses somewhat more substantial and convenient.

The earliest style of domestic architecture practised in Britain appears to have been similar to that which is still used in the smaller hamlets of England, a sort of daubing or rude plastering over the chinks and crevices of the wattled walls of their wicker worked cabins with clay, or by filling up the interstices with moss. The roofs were formed much after the present mode, with boughs of trees thatched with straw, as a security against the weather.

The best authorities relate that the form of the wooden houses or huts of the ancient Britons or Gauls was circular, with lofty conical roofs; at the top or centre of which was an aperture for the admission of light and the emission of the smoke. This description of building seems to have been the original house, and the early periods of the history of most countries exhibit it as the type and origin of their architecture. We can trace it from the ancestors of the polished Greeks to the aboriginal Britons, and the villagers of the Hottentots and Caffres of Africa exhibit it to this day.

The foundations of some of the largest of these ancient British mansions were of stone, of which there are yet vestiges in the island of Anglesea and other thinly populated parts of these islands. It is probably in imitation of these primeval wooden huts that the oldest stone buildings, of which there are remains in the western isles of Scotand and parts of Ireland, were built circular in their plan and conical in their elevation, with circular apertures at the top; so that what was a mansion among the ancient Britons, and served the noblest of our ancestors for withdrawing rooms, boudoirs, parlours, and similar apartments, would make an excellent though probably small sized tile kiln of the present day.

When the Romans first invaded this country, they found nothing according with modern notions of towns or cities, but merely scattered assemblages of huts; for, according to Strabo, what the Britons called a town was a tract of woody country, surrounded by a mound and a ditch for the security of themselves and their cattle from the ravages of their enemies.

The palaces of their chiefs resembled those of the common people in construc-

tion, and differed only in size and solidity of their workmanship. From the expression of Caractacus, who when taken captive and sent in triumph to Rome wondered, in passing through its streets of palaces, how it was possible that a people possessed of such magnificence at home, could envy his humble cottage in Britain; it might be inferred as coming from the mouth of a primeval British monarch, that his subjects had made no considerable improvement in their architecture for at least a hundred years after the first invasion of the Romans.

Among the most ancient regular works of architecture in Britain (as A. D. 82) were the chain of forts built by Julius Agricola between the Firths of Clyde and the Forth, and the walls of Antoninus called the Picts Wall. Agricola is supposed also to have erected several temples, and as he is well known, on the authority of Suetonius, to have encouraged the arts of peace, we may be assured he did not neglect private conveniencies and domestic comforts.

Architects, sculptors, painters, and other artists and artisans always accompanied a Roman legion; and splendid marks of their footsteps are visible wherever they obtained admission. The first Roman colony was planted at Camelodunum, the first city on the site of our present metropolis, as early as the fifteenth year of the Christian era; and when it was destroyed by the Britons, in revenge for the cruel treatment of Boadicea, queen of the Iceni, about eleven years afterwards, it was a large and well built town, embellished with statues, temples, theatres, and other public structures. From many circumstances it is apparent that these, like the early and provincial theatres and amphitheatres of Rome, were mostly of wood till the time of Agricola, who finally established the dominion of the Romans in Britain, and governed it during the reigns of Vespasian, Titus, and Domitian with equal courage and humanity. I wish to lay some stress upon these points, as conclusive of the Roman style of architecture having preceded all others in this island, the hut and cabin alone excepted. The Romans not only constructed a great number of solid, convenient, and magnificent edifices for their own accommodation, but instructed, exhorted, and encouraged the Britons to imitate them.

Domestic Architecture flourished abundantly in our island from the time of the first invasion of the Romans to the middle of the fourth century; and the same taste for convenient, beautiful, and solid buildings which had long prevailed in Italy, was introduced into Britain. The country at this period abounded with well built villages, towns, forts, and fortified stations; and the whole was defended by that high and strong wall, with its numerous towers and intervening castles, which reached from the mouth of the river Tyne on the east, to the Solway Firth on the west. This spirit of building, which was introduced and encouraged by the Romans, so much improved the taste and increased the number of the British artists, that in the third century this island was celebrated in that respect. When the Emperor Constantine, the father of Constantine the Great, rebuilt the city of Autun in Gaul (A. D. 296), he was chiefly furnished with workmen from Britain, which (says Eusebius) much abounded with the best artificers.

Not long after this enlightened period architecture and the other arts declined; and soon after the final departure of the Romans from Britain, their pure taste in architecture was entirely superseded by new and depraved styles.

In the time of the Saxons, previous to the disturbed periods of Hengist and Horsa, domestic and public architecture are related to have been constructed with much splendour. In the year A. D. 480, Ambrosius, a British commander of Roman descent, who had assumed the regal government of Kent, built for himself a splendid palace at Canterbury. During the heptarchy, *domestic* as well as *sacred* architecture flourished, and houses and ecclesiastical buildings of various denominations began to be built in the most populous parts of the island. The monks, the only architects of the day, erected those buildings and formed that style now called the Saxon; which from its similarity in parts to the worst Roman, may warrant the conclusion, that they designed them from memory of what they had seen in Rome.

The elements of the Saxon style are short round columns and semicircular arches, such as in the crypt of Lastingham Priory, Boxgrave Church in Sussex, Waltham Abbey in Essex, and in many other parts of England. Their capitals, as may be seen by referring to the examples and their comparatives, are often clumsy imitations of the Tuscan, Ionic, and Corinthian of the lower ages of the Roman empire. This origin of the Saxon from the decadence of the Roman is clear as demonstration can admit; and forms in itself an historical and substantial style of *domestic* architecture finely calculated for entrance lodges, towers, and gates to a demesne, where the scenery is grand and awful. Its prepon-

derating massive and gigantic features if well applied accord with such purposes, particularly where the material is solid and durable, and of rather a sombre hue in its colouring tints. A Saxon castellated entrance tower of dark blue lime stone, so common in the mountainous districts of the county of Kilkenny, is an appropriate adjunct to the beautiful romantic scenery of Ireland.

As excellence is never stationary, the vicissitudes of architecture in England may be arranged into classes or epochs as follow: namely, from the splendour of the Augustan age, an emanation or ray of which had reached us under the administration of Claudius, Antoninus, and Agricola, to the declension and after hatred of Roman art and customs, on the expulsion of the Romans from the island, and to the complete establishment of the style called Saxon. Next arose another style, that now called Gothic, with all its rich and fascinating varieties, from the plainness of its Norman branch to the full embellishments of the florid styles; which romantic styles flourished resplendently to its meridian in the times of the Tudors and Plantagenets, and declined with the revival of classical literature in the reign of Elizabeth, when Roman or rather Italian architecture began to mix itself with our native Saxon and British styles, as its words did with our language; and we were then, Shakspeare and Bacon excepted, pedants in both.

Palladio, who was the father of that style of Roman architecture which was introduced into England by Inigo Jones, read Vitruvius's works in the true spirit of their author; and restored the actual ruins of ancient Rome in a purer style, and with greater *gusto* than were found in the most of their originals. His style of domestic architecture may be gathered from Lord Burlington's adaptation of one of his quadrifrontal villas at Chiswick, and his villa of Biaggio Saraceno at Vicenza.

Had Palladio, however, engaged himself in a similar examination of the splendid ruins of ancient Greece, as they were in his days, still informing himself with the opinions of Vitruvius, he might have founded a school of architecture as much superior to that now called after him as are the works of Ictinus, Callicrates, and Phidias to the colosseum and the theatre of Marcellus.

Classical architecture shone forth in the Roman style in the beginning of the reign of Charles I. perished with the Iconoclasts and roundheads of the commonwealth; rose again under Charles II. with a momentary lustre; was partially eclipsed by ignorance and bigotry in the reign of James II. and from that period till the reign of George III. a mere blank is presented in the history of the art.

Of our ancient domestic architecture after something like a style had been introduced, is Hampton Court in the county of Hereford; the ancient seat of Lord Coningesby, which was built by Henry IV. king of England, when he was Duke of Hereford, above four hundred years since. It was restored and repaired about one hundred years ago by the then Lord Coningesby, at a considerable expense; it then contained seven very noble apartments of state richly furnished, and numerous convenient private dwelling rooms, with fine gardens, a large park, and noble demesne, a well stocked decoy, and every other advantage both for pleasure and convenience.

The Roman or Italian style of architecture, as fitted for domestic purposes, was first introduced with any thing like order by Inigo Jones, whose distinguished works at Greenwich, Whitehall, and Covent Garden will ever secure him a place among names of the greatest reputation.

This illustrious English architect (Inigo Jones) had a capacious intellect, a fine imagination, and original conception. His style was grand but unequal, as may be seen in his celebrated work the chapel at Whitehall, the conception of which as a part, and that but a small part of an immense palace, is certainly noble; its primary divisions few and simple, its openings large and handsome; but as a whole it is unequal in composition and in style. The play of light and shade produced by the breaks over each column is, in a minute taste, the very opposite to grand. The Ionic specimen is one of the worst and the most impure that he could have selected; the modillons do not belong to the order, and approach too nearly to those of the Corinthian. If one order upon another be ever admissible, the Corinthian should not have been excluded for the purpose of introducing the composite.

Sir Christopher Wren, an eminent mathematician and philosopher, as well as a skilful and scientific architect, executed many of the finest buildings in London and other parts of England, in the Roman or Italian style. His style of domestic architecture was inferior to his public works, as depending more on the fashion of the day. He borrowed it from France, but did not copy it so servilely as his friend Robert Hooke did at Montague House,

now the British Museum, and in Bethlem Hospital, recently taken down for the city improvements. Wren's best works in domestic architecture are the two fine mansions at Chichester, Marlborough House Pall Mall, the late Mr. Wren's in Great Russell Street, the house of Mr. Tegg the bookseller in Cheapside, and a few others of the same character. St. Paul's Cathedral, inferior to none but St. Peter's in point of magnitude, and much its superior in construction and design, will perpetuate his name to the latest posterity.

Wren was more equal and consistent than Jones; was possessed of more mathematical knowledge; was a man of a more expanded mind; but less of an architect and artist by education, and had (generally speaking) less taste. Perhaps nothing of Wren's is equal in invention and taste to Jones's, and nothing of Jones's equals in scientific construction any thing of Wren's; or for beauty of conception and at the same time wonderful execution, Wren's transcendent spire of St. Dunstan's in the East, the finest thing of its kind in Europe. In St. Mary Aldermary, Wren is bold in execution, if not quite pure in his Gothic, and is still better in his tower and pinnacles of St. Michael's, Cornhill. St. Stephen's, Walbrook, has been extolled above its merit, for although novel in principle, it is less ingenious in construction, and more faulty in taste than any other of his best works. His spire of Bow would alone immortalize any man; so beautiful is it in form, so novel in design, and so dexterous in construction. It is not only Wren's masterpiece in composition and design, but stands unrivalled in this class of art, as well for its beauty as for its ingenious and scientific construction.

This beautiful spire, like all of Wren's, commences from the ground, unlike many of its tasteless successors, from Gibbs's St. Martin's in the Fields, to our present new churches, the steeples of which ride a straddle on the tops of their pediments. It stands at the north-west angle of the church, and rises nearly plain to a height above the houses; the doors on the external sides are enclosed in rusticated niches. The decorations to the doorways are of the Palladian Doric, embellished with cherubim and festoons. The tower is surmounted by a block cornice and a well proportioned balustrade. Each angle is relieved by a pyramidal group of bold scrolls, supporting a vase, between which rises a lofty circular stylobate, or continued pedestal, which supports a beautiful Peripteral temple of the Corinthian order, the cell of which supports the upper part of the spire, while it beautifully relieves the columns of the perystyle like an ever varying back ground. This temple is likewise surmounted by a balustrade, whence spring a series of beautifully proportioned and elegantly carved flying buttresses of a highly original shape and construction. These elevate and magically support another temple of a species of composed or composite order, forming four porticoes of two columns each, the entablature breaking fancifully over them. The whole is surmounted by a very elegant obelisk or spire, supporting a colossal vane, in the semblance of a dragon of copper gilt, and a red cross under each wing; the heraldic emblem of the city. In this romantic composition, Wren has employed four of the orders, rising above each other in due proportion. The Doric in the doors, the Ionic in the tower, the Corinthian in the lower circular temple, and the Composite in the upper.

The works of Vanbrugh, a contemporary of Wren's old age, and one of his successors in the art, are solid and judicious; but he neglected the lighter graces of his art, and is in spite of all his picturesque beauties, cumbrous and inelegant in detail. Swift's epigram on this architect is well, and in some instances he merited the satirist's

> Lie heavy on him, earth, for he
> Laid many a heavy load on thee.

Yet Castle Howard and Blenheim will keep alive the memory of the witty and accomplished Vanbrugh, among those of our greatest architects. A fair specimen of this architect's picturesque and singular style, may be gathered from his own house near the Privy Gardens, which was also a subject of Swift's satire.

The state of architecture at the end of the reign of George II, and for some time previous thereto, had been as low as at almost any period of the English history. From the death of Kent and the great Earl of Burlington, two accomplished architects of the Anglo-Paladian school, to the commencement of the reign of George III, we have no record or account of any native architect worthy of notice. The profession seemed almost to be abandoned; and new buildings, repairs, and alterations, to have been performed by that anomalous being, that sort of unodual mixture of artist and artisan, the building surveyor, or surveyor and builder, as he generally termed himself.

Kent, Gibbs, and Burlington were gone, and had left no disciples; so was Hawks-

moor the pupil of Wren, who designed the churches near the Post Office in Lombard Street, Limehouse, and St. George's in the East. And Archer, the Groom Porter as Walpole justly calls him, whose balderdash of St. John's, Westminster, that looks like the four clumsy ill carved legs of a butcher's block reversed, or an elephant on his back, had left no followers. The elder Dance, whose mansion house was preferred to a design of Palladio's offered to the city by Lord Burlington, but rejected because Palladio was a non-freeman and a papist, was a man of some genius, as his Shoreditch, a free and not unhandsome imitation of Bow Church Spire, bears witness; was not a regular bred architect, but the best and nearly the only one of his day. Batty Langley had a school or academy, but his disciples were all carpenters; and although his taste as an architect was deservedly derided, he formed a school of excellent workmen, and gave form to many a skilful artisan in a certain line of art.

Such was about the state of architecture when our late monarch ascended the throne; and it was fortunate for this art, as well as for painting and the other arts, that he was endowed with a love for, as well as considerable knowledge of them all. When Prince of Wales he studied architecture, and was taught to delineate its proportions with accuracy from the rules of Palladio, by the late Sir Wm. Chambers, who was then a naval man, fond of the study, and who had travelled. His Majesty also studied perspective closely under the late Kirby; and his drawings were correct, and, for their day and style of art, tasteful and elegant.

Chambers became the Royal Architect, but threw no new lights on the art. In its practice and more scientific department of construction he was totally ignorant. His taste was Roman and impure; yet his works have a chastened correctness of detail of the best style of Italian art. In the course of his travels Chambers had visited parts of China, and published a treatise on the gardening and architecture of that strange people. To him we owe the introduction of their fantastic, barbarous, and inelegant style.

Yet the Somerset Place of this architect has many redeeming beauties, and his work on Civil Architecture, in spite of his bad taste in reviling the architecture of ancient Greece, which he was not able to comprehend, abounds with sound remarks. His Vitruvius he read in English, and apparently from a bad translation.

The first symptom of a regular bred genuine architect, in the late reign, was the tasteful and scientific Wyat. The son of an eminent and opulent builder, he acquired the elements of his art at home, and refined and purified his taste abroad from the purest sources; an absolute necessity in those days, for there was neither master or school in England till that which he formed. On his return, he astonished the connoisseur and travelled patricians by his Pantheon, which was afterwards unfortunately destroyed by fire; by his designs, and by his knowledge of his art; qualifications till then unknown since the days of Jones and Wren, and which had led to the employment of Italian architects when any affair of consequence was required. Possessed of genius, taste, and feeling, Wyatt first introduced a correct style, remote it is true from all the transcendent purity of the genuine Greek school, but nearer approaching to it than the best Italian known. The architecture of the country, the venerable, the spoiled, and the pampered Gothic, came under his observation, and in the majestic Castle of Windsor, the Abbey at Fonthill, and the fine Cathedral of Salisbury, he executed with a chastity, refinement, and skill equal to the originals. His houses, villas, and mansions, are among the most convenient, splendid, and tasteful in the country, and bear upon their face, that their builders were not their own architects.

In a similar school, and with similar advantages, did Milne, at scarcely the age of manhood, carry away the first prize in the first class of architecture at Rome, and had the honour of being the first Briton who obtained a premium for art in that city. Before he had completed his studies, he sent over in competition, and conquered all his opponents for his Blackfriars' Bridge, a work of skill and of some originality. Milne's style was too decidedly Roman for the day; but to his honour be it spoken, his love and affection for our great metropolitan structure, St. Paul's, of which he long held the place of surveyor, was such that he never would see it defaced, or altered or spoiled in any way, and scarcely a week of his long life passed without him giving it a personal survey.

The encouragement in those days shown to architecture and regularly educated men, by the sovereign and the nobility of the country; the establishment of the Royal Academy; the titles conferred on Sir Wm. Chambers and Sir Robert Taylor,

one of the architects of the Bank of England; and the biennial premium for architecture, founded a school from which emanated many able and tasteful men: Holland, Dance (whose simple and effective elevation of St. Luke's Hospital for Lunatics, shows what genius can do with even what is called the poorest of materials, brick), Soane, Harrison of Chester, Wilkins, Smirke, Gwilt, Savage, and other eminent cotemporaries are among the scions of this school, and their works bear testimony to their talents.

The front of Carlton House, by Holland, and many of the apartments by him in that palace, possess a harmony of proportion and greatness of style, which considering the difficulties of patching up an old house, are quite admirable.

The new part of the Bank of England possesses many noble and tasteful halls. Its exterior is massive and in good taste; its construction, genuine stone, brick, and iron; by which the opulent and munificent directors of this great establishment have proved themselves to be the most economical as well as the best builders. When London is fallen,

> "And such as Memphis is must London be."
> *Old Play.*

this building, with those of Wren, and the bridges, will be almost the only ruins to indicate its present greatness, unless more of the same description shall be permitted to be built, and an edict issued against the *Mary-le-bone* and *St. George's Fields school* of temple builders.

A little stronger than strong enough is the best maxim in building, said the anonymous author of ΟΙΚΙΔΙΑ, and should be written over the desk of every architect's office. But this is flat heresy in the new school. Strong enough to last till it is sold is all that is now required, and great ingenuity is certainly called forth in its professors to accomplish it.

The custom house is a very useful strong building, not remarkable for its taste, nor for much propriety of adaptation in its ornamental detail. Furnival's Inn is contemptible as a work of art, and has no one fine quality; and the excellency of its workmanship renders it more grievous that it should be designed with so little taste.

The new street now in formation from Pall Mall to Portland Place is a great and useful undertaking; possessing, as a whole, a grand and commanding character, with more architectural features and variety than any large work that we have seen since the rebuilding of London after the great fire. Yet it has many blemishes; some of the architectural specimens being in a taste absolutely barbarous, and mixed with others equally pure and refined. Its masses, great parts, and divisions are grand and effective; and its breaks and general outline productive of a great variety of light and shade, while, at the same time, it is free from that dull monotony of elevation which is so wearisome in many of our new streets. It is also the finest work now in process, and has given an architectural feature to the metropolis, much wanted as a relief from the eternal two windows, iron railings, and a door, of the new squares and streets of St. Mary-le-bone.

Until this undertaking our domestic architecture seemed selfish and internal. Windows undecorated externally, and made solely to give light and air to the interim; and doors placed in square brick holes, whose only service seemed to be to exclude strangers, were the prevalent features of modern English domestic buildings. Whereas architecture, on the contrary, should exhibit the taste and wealth of the master of the mansion, by its exterior, to the observing stranger, as well as contribute to the internal comfort and splendour of the family, and those friends formally introduced.

Other works which add to the architectural beauty and service of the Metropolis are the bridges recently thrown over the Thames; the best are Waterloo*, Westminster, and Blackfriars; which are all built of stone, and with architectural elevations.

Among recent English works, the portico of Covent Garden Theatre, imitated in form from the tetrastyle portico of the Agora at Athens, but copied in detail from the temple of Minerva Parthenon, is, perhaps, the most chaste in style, although its application would more become a town hall than a dramatic theatre. The exte-

* Waterloo Bridge is one thousand two hundred and fifty feet long; Westminster, one thousand two hundred and twenty feet; and Blackfriars nine hundred and ninety five feet. Waterloo Bridge has nine eliptical arches, of one hundred and twenty feet span, over the river, with piers of twenty feet thick, built entirely of granite, and forty brick arches for a causeway on the Surrey side: and the entire length of its land and water arches is two thousand eight hundred and ninety feet. Westminster has thirteen large and two semicircular small arches, with fourteen intermediate piers. The arches of this bridge all spring about two feet below low water: it was commenced in 1738, and opened to the public in 1750. Blackfriars' Bridge has nine large eliptical arches, was begun in 1760, by Mr. Milne, and finished in ten years and three quarters.

rior of Drury Lane Theatre appears to be more consistent in its application; and we should not forget, in speaking of this edifice, that an Ionic portico, the antæ of which are only executed, originally completed the design.

The columns of the portico of the College of Surgeons, in Lincoln's Inn Fields, from the Ionic of the Ilyssus, are in themselves fine and well executed, but do not belong to the front to which they are attached. The beautiful Ionic portico to the house of the Board of Control, Cannon Row, Westminster, one of the purest, finest, and best applied in London, also taken from the same exquisite original, is worthy of examination.

Another very beautiful example of this order is in a chapel near Grosvenor Place, by Hyde Park Corner, designed by Mr. Smirke; where, in the portico, according to the best examples of the Greeks, and to the natural fitness of the thing, is not a mere applique stuck on as an after thought, but a natural continuation of the roof, supported by necessary columns for shelter and for shade. See STYLE, ORDER, COLUMN, CAPITAL, BASE, and the other words referred to in this article.

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ARCHITRAVE. [ἀρχὸς, Gr. and *trabs*, Lat.] *In architecture.* The chief or principal beam in a building, which, lying horizontally on the summit of the column, forms one of the three principal divisions of the entablature (see ENTABLATURE). The ancient architects in their most costly stone edifices, in general used but one stone, reaching from column to column to form the architrave; which occasioned them, as may be observed in the best an-

cient specimens, to lessen the intercolumniation; from the closeness of which result the grand and imposing effects of their ancient peristyles and colonnades (see INTERCOLUMNIATION). From the examination of the construction of many Roman buildings, it is clear that their architects were not ignorant of the manner of constructing architraves of more than one stone, as often done by the moderns; and that they purposely followed the Monolithean manner, by preference, both as to its real and apparent solidity. In modern times, when from economy of labour, the scarcity of marble, and the comparative perishability of other materials, the Monolithean architrave became difficult to the inferior architects of those days, they obviated rather than cured the difficulty by plat-bands (see PLAT-BANDS), keystones, and other paltry substitutes. Architraves thus constructed were composed of a number of stones which mutually sustained each other by their wedge like form, and were in fact a flat arch. The form and number of the mouldings, faces, and members of which an architrave is composed, varies according to the character of the order to which it is to be applied. In the Tuscan order it is a plain surface, surmounted by a fillet; in the Doric order it has sometimes two faces; in the Ionic and Corinthian, it has sometimes two, and at others three faces; and in the Composite, always three.

ARCHIVES. [ἀρχεῖον, Gr. *archivum*, Lat.] *In architecture.* Buildings where public papers or records are deposited. Edifices for this and similar purposes should be erected on a dry soil, be well drained, and in a secure situation; should be constructed of stone, well burned brick, or other incombustible material; be vaulted, the walls, floors, and ceilings secured from damp, and made fire proof in every respect.

ARCHIVOLT. [*archivolt*, Fr. from *arcus* and *volutus*, Lat.] *In architecture.* The circular mouldings round the voussoirs of an arch, terminating on the imposts or capitals of the piers. Sometimes the entire arch when divided into faces, and capped with a simple or compound member, like an arched architrave, used to embellish arcades, is so called. It is then governed by the same rules in regard to the order it is used with, as architraves. See IMPORT, ARCADE.

ARENA. [Lat. from *arendo*, whence *arenus*; a sandy place.] *In architecture.* The middle or body of a temple or other enclosed building; but is more particularly applied to that portion of the amphitheatre where the gladiators fought, which was strewed with the finest sand to ease the falls of the combatants and to absorb their blood when wounded. See AMPHITHEATRE.

AREIOPAGUS. [Lat. from ἄρειος and πάγος. The hill or rock of Mars.] *In architectural history and archaiology.* A place in Athens celebrated for the meetings of a judicial tribunal, which was held in great reputation among the Greeks. It is said to have received its name from the circumstance of Mars being the first person here tried for the murder of Hallirhotius, a son of Neptune. He was acquitted, and the site was ever after held sacred by the people of Athens. The tribunal took the same name, and at one period of its history rendered itself infamous by the condemnation of Socrates, no less than two hundred and eighty of its members voting against him. It was also in this place that Paul is described to have preached to the Athenians, standing in the midst of Mars' Hill (Σταθεὶς δὲ ὁ Παῦλος ἐν μέσῳ τοῦ Ἀρείου πάγου, ἔφη· Ἄνδρες Ἀθηναῖοι, Acts, chap. xvii. 22), concerning the erection of an altar by them, with an inscription "TO THE UNKNOWN GOD" (ΑΓΝΩΣΤΩι ΘΕΩι). The areiopagus, according to the authority of Col. Leake, whose excellent map embellishes his topography of Athens, was situated to the westward of the acropolis, near the middle of the city, on an eminence which sloped down towards the north, to a plainer site, on which stood the temple of Theseus. Dr. Spon and Sir George Wheler, who fortunately travelled before the Venetians besieged Athens, found some remains of what the former conceived to have been the areiopagus still existing in the middle of the temple of Theseus, which was formerly within the city, but is now without the walls. The foundation of the areiopagus he describes as being a semicircle, built with stones of a prodigious size, with a terrace round it of one hundred and forty paces, which properly made the hall of this court. There is a tribunal cut in the middle of a rock, with seats on each side of it, on which the areiopagites were seated, and which are exposed to the open air. The members of this judicial tribunal assembled thrice every month; their meetings were always in the open air, and they determined all causes at night, and in the dark. The first circumstance was owing to a superstitious notion of the pollution which would be contracted by being under the same roof with murderers and other flagitious criminals, whose offences fell within their cognizance; and the second custom was observed, that the minds of

members might be wholly intent upon the evidence.

ARIADNE. *In the history of sculpture.* A beautiful statue of Parian marble, now in the Vatican. She is represented sleeping on the rocks of Naxos, where she was ungratefully left by Theseus after she had enabled him to extricate himself from the celebrated labyrinth of Crete, in which he had been confined. The supposed state of her mind is beautifully represented by the disorder of her drapery and the expression of her countenance, although in slumber. On the upper part of her left arm is a bracelet in the form of a little serpent, called by the ancients Ophis; and which had long occasioned this statue to be taken for a Cleopatra. See Ovid. Met. viii. fab. 3. Fash. iii. v. 462. Nonnus in Dionys. 47.

ARMILLA. [Lat.] *In costume.* A brace or bracelet for the arm, such as captains, among the Romans, gave to their soldiers for their good services. By this name the small rings or braces that go round the neching of the Doric capital are sometimes called. See ANNULETS.

ARMOUR. [*arma*, Lat. from ἁρμὸς, Gr. and *armus*, Lat.] *In painting, sculpture, and costume.* Weapons and clothing of defence. See ARMS.

ARMOURY. [from *armour.*] *In architecture.* A storehouse to contain armour. An armoury, to be complete in its construction and appropriate in its design, should be plain, strong, and simple in composition. Its sculptural and other ornaments, and whole effect should be large and broad. An armoury thus designed, and properly embellished by trophies composed from the national arms of the country for which it is intended, if properly executed and well grouped, is capable of producing a striking effect in architectural composition.

ARMS. [*arma*, Lat.] *As above.* Weapons of offence and defence. The arms and armour of the Greeks and Romans were mostly of bronze or brass, seldom of iron, and often ornamented with gold and silver. But in Homer such ornaments are referred to, as belonging more to the luxurious and effeminate than to the brave and enterprising. The ancient Persians crowded upon their arms and armour ornaments formed of the most valuable metals, precious stones, and sculptured gems, which continually became the prey of the Greeks in battle, and excited the cupidity of all their enemies. Trophies formed of arms, armour, or sculptured representations of them, were placed as honourable distinctions on the tombs of their warriors; the bravest of whom were alone entitled to such marks of respect, inscribed with testimonials of the bravery and heroic deeds of the departed hero. See TROPHY, INSCRIPTION.

It was a practice among the Romans to raise trophies formed of arms and armour on the field of battle after a victory, and to preserve the memory of such distinguished events, they had representations of the trophies, with the name of the vanquished people, struck on medals. In the triumphal processions of the victors, the arms taken from the conquered people were carried reversed in the triumphal procession of the victorious general. In naval triumphs they carried the ornaments and arms of the enemy's ships in cars. The ancient sculptors always had the care to represent the conquered nations with arms, clothing, and costume, different from the Greeks and Romans. This attention to propriety of costume characterizes all the ancient compositions which have come down to our times, and distinguishes them from modern artists, who have been by no means so attentive to these essentials. In the number of those monuments of ancient art, which have best preserved to our times the models of their arms, the dresses and armour of their soldiers, and other important customs, are Trajan's column in Rome, the Temple of Mars at Evora in Portugal, the fine trophies said to have been dedicated to Marius in the Via Flaminia, for his triumph over Jugurtha King of Numidia, which are, however, of a less ancient date, as Suetonius relates that they were destroyed by Sylla, and reconstructed by Julius Cæsar; and the various representations of the trophies on the coins and commemorative medals of Vespasian, Hadrian, of the Antonines, &c. (See COSTUME.) On this department of ancient art, namely, the arms and military costume of the ancients, the elaborate and well authenticated work of Mr. Thomas Hope holds an eminent rank, whether it be considered for the learning which is displayed in the execution and general conception of the whole work, or for the curious and important facts which it contains, in the correct delineation of figures, dresses, implements, and weapons of war, furniture, musical instruments, &c., engraved with the utmost fidelity, from the most authentic documents of the ancient world.

It is a common opinion that modern arms and modern military accoutrements and dresses will not compose well in trophies and other armorial compositions. This is not exactly true, for although cus-

tom may lead us to give somewhat of a preference to antique forms, from an admiration of antique art, yet in the hands of a man of genius the difficulty will vanish. At the entrances of many of our naval arsenals and military depôts are armorial trophies composed entirely of the implements and weapons of modern warfare, with great success and effect. The French have also succeeded in this branch of composition, and many fine specimens are to be found in various parts of their kingdom. Percier in some trophies to the base of a car of victory, erected by the French at Venice, from that architect's designs, and Moreau in the trophies at the angles of a design for a national monument for Paris, have been eminently successful in the grouping and arranging of these modern elements of military trophies. The before quoted work of Mr. HOPE, and the several treatises on costume, &c., by Captain GROSE, Dr. MEYRICK, WILLEMAIN, GUYOT, and LENS, all contain excellent representations and descriptions of antique arms and armour, fit for the study of the artist.

ARROTINO. *In sculpture.* A celebrated antique statue in the Gallery of the Great Duke of Florence. It represents an old man naked, resting upon one knee, and whetting a knife upon a stone, with his head in an attitude of listening. In the palace of the Tuileries is a fine copy of this statue in bronze, cast by the brothers Keller, and in the Royal Gardens at Versailles another in marble. There are some copies in England, among which is a very good one at the Royal Academy. It is called by the French antiquaries and critics, Le rotateur, or remouler, and has excited much discussion as to its action, expression, and meaning. A writer in the Encyclopædia Metropolitana conceives that it denotes an attitude of listening, as if cautious not to be observed. Millin thinks he discovers in its expression a ferocious smile, and conceives it to be the image of a slave, who, while dissembling to sharpen his knife, is overhearing a plan of a conspiracy; perhaps that of Vindex, who discovered the conspiracy of the sons of Brutus; or of Milichus, who informed Nero of the projects of his master Scevinus and the Pisos against him. Others conjecture it to represent the Augur Nævius, who severed a flint with a razor in the presence of Tarquinius Priscus. Neither of these conjectures can be supported by the authority of antiquity, for the statue is naked, which is contrary to the ordinary practice of the Roman sculptors, although not to that of the Greeks. Winckelman in his Monumenti inediti, and M. Bættiger in an excellent dissertation upon the flute, printed in the Attic Museum of Wieland, a translation of which is to be found in the fifth volume of the Magazin Encyclopédique, think it to represent the slave employed by Apollo to flay Marsyas.

ARROW. [from the Anglo-Saxon *arcwe.*] *In archaiology.* A pointed weapon, usually shot from a bow. Representations of these weapons of offensive warfare are often discovered, among others, on ancient monuments. They were among the principal missiles of ancient warfare, and were of various forms and sizes. On a Panticapean medal is a representation of a Scythian bow, with an arrow of a singular form; and on a Greek vase, described and delineated in the first volume of A. L. Millin's Monumens Inédits, is another of the same form, introduced in a combat which that author thinks is between Theseus and the Amazon Hippolyta.

ARSENAL. [Italian, from *arx*, Lat. a tower, fort, or citadel.] *In architecture.* A public manufactory or repository of arms, ammunition, and other warlike stores. The ancient Romans had arsenals (ARMAMENTARIA) on every frontier of their vast empire; and the moderns of all nations have them also in every fortified city. England, naturally fortified by the sea and her floating wooden walls, possesses some of the finest naval arsenals in the world, at Plymouth, Portsmouth, Chatham, and Woolwich; and for the same reason has neither frontier towns, nor, strictly speaking, military arsenals. The naval arsenals of Great Britain, which have also military appointments, are for extent, excellent arrangement, and construction, among the finest in the world, and may vie with many of the wonders of the ancient world. Of the arsenals on the continent of Europe, that of Paris is said by Millin to be among the most ancient, although it does not class among the best, as was proved on the capture of that metropolis at the close of the last war. That of Berlin is reckoned one of the finest, and is excellently situated, having its right wing on the banks of the Spree, which renders it commodious for water carriage. The arsenal of Venice is one of the largest and most convenient in Europe, being entirely insulated, and occupying several small islands. Like those of England it is principally naval, and contains the celebrated vessel of the republic the Bucentaur.

ART. See ARTS.

ARTEMISIA. *In the history of the arts.*

The queen of Mausolus, King of Caria, a woman of renowned chastity. After the death of her husband she drank his ashes mixed with wine, and built to his memory such a stately tomb, that it was reckoned one of the seven wonders of the world, and has given the name of Mausolea to all buildings of that description. See MAUSOLEUM.

ARTICULATION. [from *articulatio*, Lat.] *In anatomy, painting, and sculpture.* The juncture or joint of the bones for the due performance of motion; or, a movable connection of bones, when two bones joined together may be moved *to* and *from* each other. A knowledge of the different kinds of articulation is a necessary part of anatomy, and particularly essential to the painter and sculptor, for if the just articulation be not correctly expressed in a figure, it will always appear lame, deformed, and imperfect. Articulation is considered by the best anatomists as the union of one bone to the extremity of another, whether the two bones can be moved upon each other or not. The movable connection is divided into three kinds: namely, *Diarthrosis*, where there is obvious motion; *Synarthrosis*, where there is obscure motion; and *Amphiarthrosis*, where the motion is imperceptible. They have again their several subdivisions, which are best learned from distinct treatises, and the lecture and dissecting rooms.

ARTILISE. [from *art.*] To give the character of art. "If I was a philosopher," says Montaigne, "I would naturalise *art* instead of *artilising* nature. The expression is odd but the sense is good." *Bolingbroke's Works.*

ARTIST. [*artifex*, Lat. from *artus* and *facio.*] The professor of an art. The Greeks and Romans do not seem to have distinguished by names the difference between the artist and the artisan, or workman. Τεκνίτης with the one, and *artifex* with the other, being indifferently applied to either. The Italians on the contrary appear to have been the first to give them their just appellations. "*Artista*," says Milizia, "è chi esercita le belle arti. *Artigiano* è chi pratica qualche arte mechanica." The words have come to our language through the French, with the Italian or proper meaning.

An *artist* is one who professes or practises a liberal art; an *artisan*, one who follows or exercises a mechanical trade. The mason, the bricklayer, the carpenter, the smith, the house painter, the paper hanger, the room decorator, and such like, are artisans; the architect, the sculptor, the painter, the engraver, &c., are artists. For too great a length of time have artisans been permitted to usurp the title of artists. A name which they have assumed, perhaps, because they follow some inferior branch of art, carried on after the manner of a trade. But it is time that the correct definition of the word should be adhered to, and that the honourable title of an artist should only be allowed to such who practise a liberal art after a liberal manner. Custom in England does not give the name of artist to the poet, the musician, or the comedian, although the arts which these professors exercise are liberal in the fullest extent of the word, because their own distinctive titles are sufficiently high and specific; and because, perhaps, that the professions of the painter, the sculptor, the architect, and the engraver, with their several subordinate departments, have each of them a certain portion of mechanical art, and are of more obvious and immediate use to community. While the art of the poet, the musician, the dramatist, have nothing, or at least should have nothing of mechanical art, or what was formerly termed handy work, the *artes manuariæ* of the Latins, to distinguish them from the *artes liberales*, in them, and are more the results of the wants of the mind or sentiment, than of the body. In France the custom is somewhat different, for in the vocabulary of its language, the comedian, the pantomimist, the dancer, the juggler, the cook, the hair dresser, are all *artists.* This honourable title should not, however, be thus indiscriminately prostituted, but bestowed after the manner of the great men of the best days of Italian art and literature upon the professors of the fine arts only; and then only upon such as practise them as an art, and do not mix them up with trade, or lower them by their practice to assimilations with the most sordid parts of commerce. The builder should not be called an architect, nor should the sign painter, the figure caster, or plasterer, the chair sculptor, commonly called cabinet maker, the paper hanger and wall decorator be called artists. Their proper appellation, artisan or tradesman, and the certain profit attendant on all their labours are sufficient for their exertions; because their employment does not consist in the exercise of the higher faculties of the mind, but in practising lower departments of art, or, in executing the thoughts, the designs of others; without possessing that

ardour, that enthusiasm, those sentiments and feelings for the sublime and beautiful in art, that sensibility which approaches to, or calls in the aid of poetry, and nourishes a brilliant fancy, and those indescribable faculties of the mind which alone can constitute the artist. The artist, especially the architect, is particularly indebted to Mr. Soane, professor of architecture in the Royal Academy, for the zeal with which he has ever defended the dignity of art in his lectures to the students, and for the manner in which he has conducted the profession itself. He has defended his own profession with the feelings of a real artist, in an essay on the dignity of the professional character, against the ignorant pretensions of artisans, in Mr. Prince Hoare's periodical paper called "THE ARTIST." 4to. Lond. 1807.

ARTS. [*artes*, Lat. from ἀπὸ τῆς ἀρετῆς virtue, manly skill.] Works performed by the power, skill, and ingenuity of men. The arts are usually divided into mechanical, scientific, and liberal. The wants of the body produced *mechanical arts* and skill; the wants of the mind the *scientific arts* and ingenuity; and the wants of refined sensibility, or the effusions of the heart the *liberal arts* and genius. The *liberal* and the *scientific arts* are such as require the greater faculties of the mind, as poetry, architecture, painting, sculpture, grammar, rhetoric, music, physic, mathematics, &c. &c. The *mechanical*, on the contrary, are such as demand more labour of the hand and body than of the mind; such as the whole body of mechanical trades, carpentry, masonry, turnery, carving, &c. The liberal and scientific arts are again divided into the *fine arts* and the *sciences:* the *fine arts*, which alone appertain to this Dictionary, is a term synonymous with the French expression *beaux arts*, and the Italian *belle arti*, from which languages it has been adopted into our own. The fine arts are architecture, painting, sculpture, and engraving. See ARCHITECTURE, PAINTING, SCULPTURE, ENGRAVING.

The Greeks had no general expression whereby they distinguished what we term the arts from trades or handicrafts. One word in their language τέχνη (*ars*), signified both an art and a trade; and τεχνίτης (*artifex*), both an artist and a workman; yet they characterized every artist by a proper name which indicated the department of art which he practised. The word τέχνη is derived from τεύχω, I construct or prepare; because the τεχνιτης constructed and provided every thing that was requisite for the wants of life. Among the Romans, the word *ars*, from which we have derived *art*, had the same meaning as the Greek word τέχνη. The word ART is derived by different philologists from different roots; by some from the Greek verb ἄρω (inde Latin ars), I arrange or dispose; because art arranges different parts to form a whole, while others derive it from ἀρετὴ virtue, or manly skill. Art generically consists of the union of different arts, called the arts, or the fine arts, and comprehend painting, sculpture, architecture, and engraving. The term FINE ARTS sufficiently denotes that they are a conjunction of the pleasing and the useful, and are employed in the embellishment of objects invented by the mechanical arts, &c. They are also called liberal (*liberales artes*) from being freeborn, of good parentage, well bred; and owe their origin to the natural desire of embellishing the things we use. The fine arts, like every other human invention or discovery, derived their incipient excellencies at first from chance, and appeared but of little importance; but when they began to be investigated, they obtained a due consideration and became studies of utility and consequence. The intention, end, and application of the fine arts is to impress striking and distinguished characters upon objects which they embellish; to communicate a lively emotion to the soul; and to elevate the heart and mind.

It is erroneous to attribute the invention of the fine arts to any single people, from whom they were communicated to other nations. They are, on the contrary, indigenous in every country where human reason has, to a certain degree, developed itself; but like the productions of the earth they take different forms, according to the nature of the climate and the wants it produces, while they remain unknown among entirely savage nations. We find music, dancing, eloquence, and poetry, in every nation that has arrived to the first degree of civilization, and it has doubtlessly been so in all times. To seek for an origin of the fine arts, it is not necessary to go back to the Egyptians or the aboriginal Greeks, for they may be observed in a state of infancy among nations of the same degree of civilization, in every age and clime. We therefore perceive that the term *art* is applied to the imitation of all forms in their highest degree of natural or ideal beauty by mechanical means. It comprehends in this accepta-

tion the union of all the *arts* which depend upon a knowledge of design, as painting, modelling, sculpture, architecture, engraving, musaick*, &c.

A narration and description of the different changes and varieties of style which have prevailed among different people, in the various departments of the arts, furnishes what is properly called the history of the arts, and which is the principal subject of the works of Winckelman, Heyne, and other authors who have written upon archaiology. (See ARCHAIOLOGY.) Opinions have differed as to what people first practised the fine arts; but it is an unnecessary inquiry as it is innate with all. Love, celebrated by the mythologists as the governor of nature, was the parent of the arts; and music, after their system, was his first born. According to a Grecian apologue, a young girl was the first artist, who, perceiving the profile of her lover's features cast on the wall by the strong light of a lamp (Pliny, lib. 35, cap. 12), drew the first recorded outline from this cherished object of her affections. From such a slight beginning, according to this fable, arose those arts whose softening and humanizing qualities have moderated the barbarism of man, and alleviated the disastrous effects of vice; those arts by which an inspired musician appeased, with the tones of his harp, the ragings of a barbarous prince; by which a poet, by an ingenious and applicable apologue, recalled a mob to truth and reason; by which a sculptor or a painter, under the veil of a pathetic allegory, presented to the depraved the forgotten traits of virtue.

In attempting a slight sketch of the history of the fine arts, the first steps are doubtful, and must be in a great degree hypothetical. The *first* epoch is that period before the universal deluge, which has left an immense blank in the history of the times which preceded it. All that passed in the lapse of ages, anterior to that catastrophe, is almost lost, for the chronologies of different nations are so contradictory to each other, that they attest nothing but the fact of a deluge. The arts, both liberal and mechanical, must have been understood previous to the deluge, as the construction of Noah's ark, and other accounts mentioned in the scriptures, sufficiently prove. The people who could construct that vast floating receptacle of a family, with two couple of every species of living animals, with necessary subsistence for a great space of time; a work which puts in rivalry the great floating towers of our times, that waft the riches of the world from pole to pole, could not but have made great progress in the mechanical arts. They must have also made some progress in the liberal arts, as we read that music was known to them from the invention of Jubal, and that Tubal-Cain was skilled in the art of working and casting metals.

The *second* epoch is that period after the deluge till the more certain ages of Egypt and Greece. Architecture was the first of the arts which reared her head after the universal destruction of the world. This epoch is distinguished in the sacred writings by the building of the Tower of Babel, &c. In less than two centuries after the deluge the arts were cultivated in Chaldea, China, Egypt, and Phœnicia. Nimrod laid the foundations of Babylon; Assur built the celebrated Ninevah, whose principal street was reported to be of three days journey in length. Many cities were built, in the times of Abraham and Jacob, in Palestine, and the neighbouring countries. Tosorthus, successor to Menes, the first King of Egypt, is said to have invented the art of cutting stones, and *Venephes*, or Cephrenes, had already constructed the first pyramid, which served as a model for the others that shortly followed. The accurate graphic and literary descriptions given by modern travellers, of the enormous edifices of this period, many of which are now existing, give us an idea of the state of arts in those days. They bear the character of the infancy of art, rude in their design, yet imposing in their massiveness and extraordinary size; they attest more the vast exertion and perseverance of the bodily powers, than great exertions of cultivated minds. The spectator views them with but a mournful satisfaction, and they appear to bear the epitaph of departed centuries, which have prostrated themselves before them. The origin of the singular style which pervades these, as well as other Egyptian edifices, is to be found in the nature of the climate, and in the productions of their soil. First, their excavating for themselves retreats in caverns from the ardent rays of the sun, established the sepulchral style which is the type of their architecture, and is impressed upon all their edifices. Thus the climate stamped the character of their architecture, and gave birth to other useful arts. The rarity or total want of the refreshing dews of heaven, in certain parts, taught the inha-

* We prefer this etymology to Mosaic, which appears as if it was derived from Moses, whereas its proper derivation is from *opus musivum, musea, musiva,*——*inde musaic.*

bitants of those regions the science of hydraulics, and caused them to form and multiply continually the quantity of canals, lakes, reservoirs, and cisterns, to regulate and confine, within necessary limits, the inundations of the Nile.

About the year 2040 of the vulgar era the famous lake at Mœris was excavated. This astonishing work is alone sufficient to impress upon our minds the extent of their acquirements and skill at this early period; and others, no less wonderful, justly surprise us, the flourishing state of the arts in these ancient times, which has covered all Egypt with the scattered ruins of antique splendour. On all sides are seen enormous fragments of columns, obelisks, sphinxes, and statues; among which some travellers have pretended to have discovered the celebrated statue of Memnon, which emitted sounds at the rising and setting of the sun. A colossal bust of this description is among the Egyptian sculpture at the British Museum. Architecture was not the only art which then flourished. Sculpture preserved an equal rank, and Painting was not altogether unknown. The walls of their edifices were covered with hieroglyphic figures, the paintings in some of which are still remaining. These sculpturesque paintings, or painted sculptures, it is true, do not present any of the modern beauties of light and shade, but their simple contours are boldly designed, and exhibit, in many instances, considerable knowledge of the human form. Examples of these curious paintings were accurately copied by the lamented Belzoni, and exhibited in his interesting Egyptian exhibition in Piccadilly. One of the most celebrated works of art of this epoch is, the vast labyrinth which was finished in the reign of Psalmetichus, two hundred years before the Trojan war. It was composed of thirty principal apartments, which corresponded with the number of nomes or governments of Egypt. These were again subdivided, and composed, in the whole, with the subterraneous chambers, three thousand three hundred apartments. At the opening of the doors, it is said, the vibration of the column of air produced a noise like thunder. The beams were of acacia, beautifully polished, and the ornaments were of the highest degree of costliness and splendour. This building contained in its circuit several temples and pyramids, and Apion relates, that he saw a Serapis of a single emerald, nine cubits in height. Some authors have thought, from this circumstance, that they had the art of making glass, and that this statue must have been of this substance, of the emerald colour: if this be true, it serves to explain the extraordinary circumstances of the column in the temple of Hercules at Tyre, which, Herodotus says, was of emerald, and cast a brilliant light in the night.

Man, in all ages, is the imitator of nature, even in the most artificial of the arts. This has made him form the ornaments of architecture after natural subjects, as in Egypt the capitals of columns are imitations of branches of palm or leaves of the lotus and papyrus, plants indigenous to the soil; and in Greece the acanthus was used in forming the beautiful Corinthian order, in which they have imitated the Egyptians in selecting their ornaments from the plants of their own country. The works of art of the Egyptians, from their intrinsic value, are deserving of much and serious inquiry, to illustrate the works of Nimrod, of Assur, of Ninus, and Semiramis. In Egypt facts are proved, and positive remains attest the truth of the historian's pen, and put an additional value on all his other writings. It is in Egypt that granite and porphyry are speaking witnesses to every eye, in the language of truth. Among the monuments of art which still exist, the most extraordinary are those which are attributed to Sesostris, one of the earliest of their kings, who, after having conquered a vast extent of territory, occupied himself strenuously in making his kingdom flourishing, and in conveying the wonderful relations of his prowess and wisdom to posterity. To prevent the incursions of his enemies, with which his country was threatened, he built a wall of five hundred stadii in length, from Pelusium to Heliopolis. Intent upon every project to extend and facilitate commerce, he conceived the project of joining the Red Sea to the Mediterranean by a canal, and which he only abandoned for the more important object of enclosing his cities with walls and vast ramparts, to preserve them from the encroachments of the Nile; which, towards the commencement of summer, extended itself like a vast sea over the whole surface of Egypt. The necessity which led the inhabitants to oppose this inundation with enormous walls, embankments, and terraces, imposed upon them that immense solidity in their edifices, which are now such great ornaments to their country even in their ruins. At the time of this beneficial inundation, the sight of the colossi, the pyramids, obelisks, moles, and other edifices of ancient Egypt, must have been a grand and imposing ob-

ject: an azure crystal, forming a perfectly level base to these enormous structures, whose summits appeared to pierce the clouds, and whose forms reflected in the water, appeared to be lost in the profundity of the abyss, and, at the same time, the ponderous immobility of these architectural masses must have formed a singular contrast with the light vessels, gliding with rapidity in all directions on the surface of the water, and would form a splendid subject for the pencil of Martin.

This same enlightened prince (Sesostris) founded that celebrated society, or college of priests, which was so long the depository of the arts and sciences. He besides built in every city a temple in honour of the deity he more particularly revered. At Thebes he erected two obelisks or meridians, each one hundred and eighty-two feet high, and furnished it with those clusters of architectural and sculptural magnificence which rendered its celebrated hundred gates but as inferior curiosities. The magnificence of Sesostris is probably overrated by Diodorus, who relates that this monarch offered to the gods a vessel of two hundred and eighty cubits long, built of cedar wood, and covered inside and out with plates of gold and silver. Although not entirely without foundation, the same writer, in speaking of four temples, cites the first that was erected as a prodigy of size and beauty, its circumference being thirteen stadii, its walls twenty-four feet thick, and forty-five cubits high. He has also left a description of one out of forty-seven of the tombs constructed by the earliest kings in the environs of Thebes, which is attributed to Osimandes, one of the successors of Sesostris. The entrance to this mausoleum was by a vestibule of two hundred feet long, and sixty-seven high, ornamented with the finest marbles. This led to a square perystyle, supported by columns, in the form of animals, and spangled with golden stars, on a ground of sky blue. Next to this was another vestibule, similar to the other, but more richly ornamented with sculpture. Among the most remarkable of their kind were three enormous figures, of which the principal, fifty feet high, represented the founder of the building. After this was another grand parystyle, where the exploits of Osimandes were engraved on the walls. In the centre, by the side of an altar of valuable marble and of exquisite workmanship, were seated two statues, twenty-seven cubits high. Between these, three doors led to a spacious hall, two hundred feet square, supported by columns, in which were a number of statues carved in wood, representing a numerous auditory, with judges seated on rising seats, appeared as administering justice. Adjoining this was a gallery, with small apartments or cabinets on each side, where were tables decorated with representations of victuals: and farther on in the same gallery Osimandes, prostrating himself before Osiris, is offering sacrifices to that deity. Another part of the building contained the library, near to which sculptured images of the gods of Egypt were religiously preserved. Not far from there was an elevated saloon, where the statues of Jupiter, Juno, and Osimandes were represented reposing on couches: and several recesses in the saloon contained the representation of the most useful animals revered by the Egyptians. At last the ascent led to a platform on the upper part of the tomb, where was that celebrated circle of gold which had the days of the year marked on its circumference, and which Cambyses took away in his conquest of Egypt.

This description, and many others less exact, which are corroborated by modern travellers, give but an imperfect idea of the magnificence of the Egyptians. A few lines may be spared for the immense works of art which covered the soil of ancient Thebes. The Nile runs for the space of four leagues in the middle of the ruins of this vast city. Here the masses of antique splendour contrast themselves, with far more modern edifices pulverized at their feet. The different ages, indicated by different constructions, are heaped one upon the other. On one side an edifice, contemporary with the first ages of the world, is covered by the ruins of its junior, that may be enumerated by centuries; and, on the other, an artificial rock of building serves but for one side of a temporary wooden cabin. The first striking object on the western side of the river is an arena, forming a parallelogram, of a league in length, by half a league in breadth. A small distance from thence is the palace of Medinet Abo, whose walls, built slopingly, are crowned with a gigantic torus; a row of columns, isolated above, and united at the bottom by a low wall, separates the first court from the entrance gate, which is guarded by two moles. Two of these columns are surmounted by capitals, and crowded with hieroglyphics, which are covered, and still preserve a considerable portion of brilliancy. With the exception of a few walls, a portico of square pilasters, some statues and bassi

rilievi, the rest of this once splendid edifice is but a heap of ruins, mingled with demolitions and rubbish of modern structures. Proceeding northwards on the plain, in the middle of several fragments, are two statues thrown down, but in the ordinary attitude, and the arms placed perpendicularly by the sides of the body; and at a small distance farther are two seated figures, that have often been described, and well known by the name of the Colossi of Memnon: they are without grace, but also without any striking faults of proportion; the simplicity of their attitudes and their paucity of expression give them a grave character perfectly architectural, with somewhat of a monumental aspect, and does not lessen their gigantesque appearance. On their seats are sculptured two standing figures and several hieroglyphics, which the French travellers, who visited them in their expedition to Egypt, say, are so well executed, that they are truly admirable, particularly the plumage of the birds. On the left leg of one of these statues is engraved the names of those celebrated personages of different nations, who bear witness in different times of their having heard the musical tones which proceeded from the statue of Memnon, on the rising and setting of the sun. According to Herodotus and Strabo the statue of Osimandes was placed between these two colossi, which are the largest in Egypt. Several artists, who accompanied the French expedition to Egypt, speak with enthusiasm of an immense fragment of statue of basalt, which they discovered near this spot, with its face turned to the ground. Nothing, say they, could equal their astonishment when, after having brought it to light by removing the sand in which for ages it had been buried, they found it as perfect and in as fine preservation* from this circumstance, as if it had just come from the sculptor's chisel. Their first intentions were to have brought it away, but this the enormous size of the mass prevented. So these enlightened travellers, convinced that in barbarous countries, and among uncivilized people, the hand of man is often more destructive to works of art than the lapse of ages, covered up and confided to its former protector the care of this fine production of ancient art, where it remained till the indefatigable Belzoni removed it to London. The fragments which remain near the portico of the grand court are yet more enormous in size, and are reckoned to be the remains of the colossus of Memnon: the shoulders are twenty-nine feet across, which would make the statue eighty-five feet high; its material is of red granite. In the British Museum are several very fine fragments of Egyptian art, and particularly an enormous hand of the same stone, obtained, with many others, at the capitulation of the French, to Sir Ralph Abercrombie, in 1803.

It is in the tombs of the kings of Egypt that we must seek for the best preserved specimens of their paintings and for the most correct information on their costume, their arms, furniture, utensils, musical instruments, their religious ceremonies, and their triumphal celebrations. The deserts of Egypt seem to have been at all times the asylum of death; their arid soil appears naturally fitted to preserve the mementoes of departed friends, and the silent dreary aspect of nature appears to promise eternal rest to the souls of the departed, which the ancients thought hovered about the place of the bodies' interment. The sepulchres in the western part of Thebes are placed in the middle of a solitary valley, surrounded by a circle of rocks, which have the appearance of a multitude of grottoes excavated in the solid stone. The principal object which strikes the attention is a doorway, ornamented in its upper part with a scarabeus, and a man with the head of a sparrow-hawk enclosed in a circle; outside of which are two kneeling figures. The interior is disposed in the form of galleries; the walls are covered with hieroglyphics, carved in the stone, and coloured. All the sepulchral chambers do not resemble this; being sometimes surrounded with porticoes of square columns, and the galleries having apartments on the sides, embellished with all the luxuriance of Egyptian art. In spite of the dilapidations occasioned by time, and the filtration of water through the joints, the greater part of the walls are covered with paintings in perfect preservation. The figures on the ceiling are painted in yellow, on a sky blue ground; they are principally representations of arms of various sorts, armour, arrows, bows, quivers, sabres, helmets, lances, and other weapons of offence and defence. In other places are representations of utensils, furniture, seats of various sorts, beds and couches, vases, baskets, instruments of tillage, and tools of various sorts. Some of the paintings are described by a French artist, who visited them with the expedition; he describes a husbandman sowing his grain on the banks of a river, where

* This is the colossal head of Memnon spoken of before as being in the British Museum.

the inundation has subsided; another cultivating rice. In another, he was delighted with a figure dressed in white, performing on a harp with eleven strings. (See the great work on Egypt, published by the French Government.) These and other similar domestic subjects are mixed with mysterious subjects; among which are some black figures, whose heads are separated from their bodies; and others in red, in the attitude of executioners. The vast extent of the temple of Karnak or Carnak, situated in a modern village of the same name is another source of admiration at the wonderful state of the arts in that very early period of the world; but not having room to describe every grand work of Egyptian art, the inquiring reader is referred for more ample particulars to the works of NORDEN, POCOCK, DENON, HAMILTON's *Egyptiaca, the Cours Historique du Musée Napoleon*, &c. (See also HIEROGLYPHIC.) At Lucqzor are many fine specimens of art deserving notice, of which accounts may be found in the beforementioned works.

Another most astonishing production of ancient art is the portico of Hermopolis, a building of one hundred and twenty feet long, and sixty feet high. The columns, surmounted by capitals different from any others, in Egypt, are formed of bundles of the lotus, and are upwards of thirty-five feet in circumference. The architrave is composed of five stones, of twenty-two feet long each, and that which remains of the cornice is twenty-four feet in length. The richness and luxuriance of the ornaments are well preserved, and kept subordinate to the general effect of the whole. It has a globe with wings, sculptured on the astragal, on the two sides of the portico, and on the soffit between the two middle columns. The temple of Dandera or Tentyra, anciently Tentyrus, is considered by the most able critics as a model of excellence in art; it proves that the perfection of architecture does not consist only in the use of the classical orders, but in the result of the perfect agreement of the different parts among themselves. This splendid temple is covered with bassi rilievi, inscriptions, and sculptures of historical and mystical subjects. The simplicity of plan which it possesses is one of its greatest beauties, and the ordonnance of the lines of its composition are so striking, as to render the ornaments, as they always should be, accessories only to the design, and leaves to the elevation all its nobleness and grandeur of appearance undisturbed. A large cornice, in the middle of which is a fine head of Isis, majestically crowns the uppermost part of the building. In the frieze is the winged globe, and the platbands of the middle intercolumniation are likewise so decorated. A large torus, which encircles the whole building, gives an appearance of solidity to the sloping walls, and takes away from the meagreness of the plain angles without hurting the general mass. The columns of the portico are finished with capitals formed by the head of Isis, and the whole exterior is covered by innumerable hieroglyphics. The interior is decorated with all the mysticism of the arts and sciences; astronomy, morality, and metaphysics, have here desposited their secrets. Among the principal decorations, the sphynx is predominant; but the most wonderful one is a large celestial planisphere, which is painted on the ceiling of the upper apartment of the main building. This picture is divided into two equal portions by a large figure, which is supposed to be of Isis, having its feet on the earth, its arms extended towards heaven, and occupying the space between the firmament and the terrestrial regions. In the other half is a similar figure in a similar situation, surrounded with globes and innumerable hieroglyphics. Next to this is a second chamber, also covered with hieroglyphic paintings. The principal part of the subjects on the ceilings relate to the motions of the heavenly bodies; and those on the walls to the movements of the earth, the influence of the air and the water; and Isis representing, with her attributes, the particular divinity revered in the temples of Tentyra. Many of the smaller temples, which are hidden under the ruins of modern Arabic buildings, contain sculptures, among which the zodiac is particularly distinguished. (See also section I. of the article ARCHITECTURE.) Besides this, Tentyra possesses the earliest known examples of truncated figures *(caryatides)*, supporting entablatures instead of columns. The fine temple of Esnay, the ancient Lotopolis, is a fine example of Egyptian architecture; it has eight columns, which are richly sculptured, and have capitals composed of representations of the vine, lotus, and palm leaves, but nothing in all Egypt surpasses the beauty of Etfu, the ancient Apollinopolis, being magnificent and splendid in its detail, and picturesque in its effect. The building is situated on a rise, commanding a spacious valley. Its general aspects are a long suit of pyramidal doorways, courts, galleries, porticoes, &c. constructed with immense masses of stone, that give to the different ornaments

the sharpness and beauty of the finest marble.

The preceding brief accounts may serve to give a general idea of the state of the fine arts among the Egyptians. Architecture, on account of being better preserved to us than others, is, of course, the principal feature. What has been said of the pyramids of Memphis may serve for those of Ghisa, Sakhara (the ancient Necropolis), and others, as they are all much alike in their general aspect.

II. The next stage in the history of the fine arts directs us towards the Jews, the early part of whose history is so closely connected with that of Egypt. The fine arts cannot be supposed to have made any great progress among the Hebrews, whose principal object was the culture of their lands and care of their flocks, and the most simple means to maintain a wandering or pastoral life. They began, during their residence in Egypt, to study the arts; but their law forbidding the representation of men and animals, and particularly the Deity under the human form, which, though it was not obeyed to the strictness of the letter, produced an impression on their minds unfavourable to the arts, and obliged their artists to confine themselves to the representation of flowers, leaves, &c. It appears that they were acquainted with the art of forging and casting metals, and carving in wood or stone; but though the high-priest had the names of the different tribes engraved upon precious stones on his breastplate, it is doubtful whether they excelled in that art. It is certain, that in the most flourishing times of their monarchy they employed foreign artists, as is evident by those of Tyre and Sidon being engaged in the construction of the magnificent temple of Solomon. Their style forms no epoch in art, as it so much resembled the Egyptian. It is surprising that there remains no vestige of art of this people, who have been so celebrated, and who, under the reigns of David and Solomon, at least professed some taste; which may be ascribed to the jealousy of their cotemporaries, and indeed the contempt with which they are spoken of by all the ancient authors, except Plutarch. This contempt cannot alter their character in the present day, but still suppresses in them all regard for the arts. There are very few Jews who have been celebrated in the arts since their recovery. Nothing certain is known respecting their ancient dresses, but from circumstances it may be conjectured that, in cities it consisted of a short or long tunic, with long sleeves, confined in the middle by a girdle, as is the custom with some Jews of the present time. Fleury judiciously observes, that most modern painters have given us a false idea of Jewish costume, by representing them like the Levantines at Venice or elsewhere. Thus are we accustomed to see the patriarchs represented with turbans and beards down to their girdles, and the Pharisees with hoods and pouches. Besides the tunic, the Hebrews wore a cloak, ornamented with fringes and embroided purple borders. White and purple were their favourite colours. In war or in travelling they wore a cloak resembling the chlamys of the Greeks. They are seen so clothed upon several medals of Vespasian and Titus, struck in commemoration of the taking of Jerusalem, and having this inscription, "*Judæ Capta:*" they are engraved in *Specimen rei Numariæ de* GESNER, Imper. Rom. tab. 55, 56, 59, 60. Boys and girls had coats of many colours; such was Joseph's tunic, who was sold by his brethren. The Jews had discovered the art of making robes with sleeves of a single piece, as is related in that of Christ's being without seam. In mourning, their clothes were of a coarse stuff, straight without plaits, and of a black or brown colour; at those times they cut and shaved the hair and beard, which in every other case they wore long; they also carried their head bare, which, when out of mourning, they covered with a part of their mantle, or often with a kind of turban or bonnet. The dress of the females was a tunic without sleeves, resembling that of the Greeks. Some of the medals of the time of Vespasian and Titus, of which engravings may be seen in the before cited work of Gesner, representing the Jewish nation subjugated under the figure of a woman, sitting under the shade of a palm-tree, dressed in a tunic with short sleeves. On one of these medals the same female is represented with a long tunic and long sleeves, which corresponds with the stola of the Romans. In the most flourishing and opulent periods of the Jews they decorated their persons with crescents, earrings, necklaces, bracelets, chains, rings of gold, and wire, and jewels. The habiliments of their priests were, a train of fine white linen. The high-priest wore an additional tunic decorated with little bells, and the *ephod*, a sort of short tunic, which was worn above the other two. Although history does not relate any particular description of the costume of the Jewish kings, it is probable that it was a settled point. All the Israelites were soldiers; their offensive weapons were the bow

and arrows, darts, lances, swords, both long and short, hung on the left thigh, and slings. Their defensive weapons were a shield, helmet, and cuirass. Under their kings they used war chariots, but their form and decoration have not reached our times. It has been said, but without proof, that their ensigns or standards were of coloured cloth, distinguishing every tribe and troop. Gymnastics were not encouraged under their early kings by the Jews, but they had foot races, dances, and military exercises. Under Antiochus the Great they built a gymnasium, after the manner of the Greeks but this novelty soon lost its attractions, which it never possessed among the more serious and rigid classes. We are not acquainted whether they had dramatic representations, but they cultivated music and poetry, which they carried to great perfection. Embalming the body after death was practised by them, and so horrible was the thought of wanting interment, that one of the most terrible maledictions among them was a refusal of the rite of sepulture. Buonarotti, in the *Observazioni sopro alcuni Frammenti di Vasi di Vetro,* plate vii. fig. 1, 2, and 3, gives the form of three examples of the earliest times of Christianity, where is represented three dead bodies of the Jews, enveloped in bands like mummies; and the appearance of 1 and 3 would lead to a conjecture, that mausoleums, with columns, &c. were in use at these times. But few authors have spoken of the fine arts among the Hebrews; it is therefore necessary to consult those authors who have treated on their institutions and customs, religious, political, civil, and military, to obtain any information on this head: among the principal of which are, BLASSII UGOLINO, *Thesaurus Antiquitatum Hebraicarum,* Venetius, 1744 and 1769, fol. 34 vols. which is a valuable collection of dissertations concerning the government, manners, customs, &c. of the Jews. *Les Mœurs des Israëlites,* by CLAUDE FLEURY, Paris, 1802, 12mo. BERNARDI LAMY, *Apparatus ad Intelligendam Sacram Bibliam,* &c. Lugd. Bat. et Amstelod. 1711, in 8vo.; and an enlarged edition of the same, Lyons, 1723, 4to.; the same work, translated into French by FR. BOYER, under the title of *Introduction à la Lecture de l'Ecriture Sainte,* Lyons, 12mo. MELCH. LEYDECKERIE, *De Republica Hebræorum,* lib. xii. Amstelod. 1710, fol. THOMÆ LEWIS, *Origines Hebrææ; the Antiquities of the Hebrew Republic,* &c. Lond. 4 vols. 1724, 1725, in 8vo. CONRADI IKINII, *Antiquitates Hebrææ,* Bremen, 1752, in 8vo. THEOD. DASSOVII, *Hafniæ Antiquitates Hebraicæ,* 1742, in 8vo. *L'Archæologie des Hébreux de* JEAN ERNST. FABERS, Halle, 1773, in large 8vo. in German. *Les Antiquités Hébraiques, de* GEORGES LORENTIA BAUERI, Leipsic, 1797, in 8vo. THOMÆ GODIVINI, *Moses et Aaron, seu Civiles et Ecclesiastici Ritus Antiquorum Hebræorum, Ultrejecti,* 1698, in 8vo.; and the commentary which CARPSOVII has published on the work. *Moyse considéré comme Législateur et comme Moraliste, par* DE PASTORET, Paris, 1788, in 8vo. *Manuel d'Antiquités Hébraiques, de* HENRY WARNEKROS, Weimar, 1794, in 8vo. BRUNING'S *Compendium Antiquitatum Hebræarum; Francofurti ad Mœnum,* 1765, in 8vo. *Cérémonies et Coutumes des Juifs, trad. de l'Italien, de Leon de Modene, par* RICHARD SIMON; Paris, 1681, in 12mo. OTTON NATHAN NICOLAI, *Dissertatio de Prophetarum veterum Indeorum Vestitu,* Magdeburgi, 1744, in 4to. BENED. DAV. CARPZOVII, *Dissertatio de Pontificum Hebræorum vestitu sacro,* Genæ, 1655, in 4to. JOHN PRIDEAUX'S *Oratio de Vestibus Aaronis,* Oxoniæ, 1617, in 4to. JOHN ALDERMANN'S *De Vestibus Byssinis Pontificis, maximo in expiationis Festo,* Helmstadii, 1717, in 4to. RUDOLPHO HOSPINIANI, *De Festis Judæorum et Ethnicorum,* &c. lib. iii. Genevæ, 1675, fol. GUILL. OUTRAM, *De Sacrificiis Judæorum,* lib. ii. Amstelod. 1688. OTTON. CHRIS. FISCHERI, *Dissertatio de Suppliciis Hebræorum,* Helmstadii, 1717, in 4to. JUST. FRID. LACHARCAE, *Dissertatio de Re militari Veterum Hebræorum,* Kiloni, 1735, in 4to. JOAN HIERON. SOPRANI, *Digressio de Re vestiaria Hebræorum,* Lugduni, 1643, fol. PETRI ZOVNII, *Dissertatio de Armis convivalibus veterum Hebræorum,* Amstelod. 1735, in 8vo. MARTINI GEIERI, *Tractatus de Hebræorum lecta Lugentiumque ritibus,* Francofurti ad Moenum, 1683, in 12mo. In addition to other works on the antiquities of the Jews, the student should consult the *Jewish Antiquities* of FLAVIUS JOSEPHUS; the dissertations which AUGUSTIN CALMET has inserted in his *Commentary on the Bible*; Bishop STACKHOUSE'S *History of the Bible,* and, indeed, any of the numberless authors that have written upon the general or particular history of the ancient Hebrews or the modern Jews.

III. The next grand works of ancient art, that tend to form an epoch are the immense wonders of Babylon, which, however fabulous they may appear, are fully justified by the structures of Egypt and the East Indies; and the traveller who has seen the pyramids of the former, or the no less wonderful excavations of the latter, can best appreciate the relations of

the palaces of Pharaoh or of Semiramis. That the Babylonians had the art of founding and chasing in brass appears from the accounts of Herodotus, the father of history, who describes the city to have had a hundred gates of brass, and, with other ancient authors, relates that walls were sculptured or modelled in brick, and painted of their natural colours. Semiramis, and Ninus her husband, were also represented, the former killing a tiger with her dart, and the second fighting with a lion. Jupiter and Belus had statues in bronze. They had also a grand group of the king and his spouse, accompanied by all the principal officers of state and their attendants. In a grand temple, in the centre of the city, was placed a statue in gold of the father of the gods, and those of Juno and Rhea, each forty feet high. Juno held in the right hand a serpent, and in the left a sceptre, enriched with precious stones. Rhea was seated in a golden chariot, having two lions in front, and two enormous dragons at the side. The rest of the accessories to these magnificent statues and temples were in the same style of richness and splendour, and proved the great perfection to which the Babylonians carried the fine arts. Yet, in relating but a few of the splendours of this great city, the great temple of Belus is deserving of attention. Diodorus Siculus says its height was almost incredible: but Strabo fixes it at a stadium, a measure which exceeds six hundred English feet, and was of those extraordinary dimensions, that when Alexander the Great would have rebuilt it after its demolition by Xerxes, the entire operation of ten thousand workmen, for two months, did not complete the preliminary operations of clearing the ruins. The celebrated gardens of this city need but be mentioned to be remembered with all their wonders; and in the same state are the immense wharfs and quays, that bordered the banks of the Euphrates, the immense canals that intersected the kingdom, and joined seas and rivers, and other works that prove the complete triumph of Babylonian art.

IV. The above slight sketch of a very early period in the history of the world, proves the great advances then made in the fine arts; and present from the earliest period down to one thousand and nineteen years before the Christian era a continued chain of gigantic projects in art. They were certainly far from that perfection which subsequent nations, particularly the Greeks, attained; but they opened the way and cultivated a pure taste which afterwards beamed over the world of art. Painting, in particular, does not seem to have arrived even at that degree of perfection to which the other arts had in this period, although design or drawing was used for the later invention of written language. Its progress from this useful purpose to that of art, may be dated from the time that certain geometrical and other figures were substituted for the graphic representations of material objects. A ladder and a tower represented the siege of a city; two armed hands, one holding a shield, and the other a bow or a sword, a battle; a palm indicated victory. Their object was not to make a very natural representation, but only to record facts of which they would perpetuate the memory, which may account for their deep incision in their walls, and for the solidity and durability of their colours, which has resisted so long the outrages of time. These causes kept painting, as an art, longer in its infancy than it would otherwise have been; yet as a fine art it was very early known. Homer speaks of it as being part of the employment of the beauteous Helen at the time of the siege of Troy; as well as the art of embroidery.

> Meantime, to beauteous Helen, from the skies
> The various goddess of the rainbow flies,
> (Like fair Laodice in form and face,
> The loveliest nymph of Priam's royal race).
> Her in the palace, at her loom she found;
> The golden web her own sad story crown'd,
> The Trojan wars she weaved (herself the prize),
> And the dire triumphs of her fatal eyes.

If Helen could draw the representation of a battle, it is probable she knew how to fill up the outline with colours; and the existence of the rich tints of Tyre and Sidon proves they not only had a splendid variety of colours, but were also acquainted with their preparations.

It is said that the Egyptians were unacquainted with anatomy; but Atothes, one of their most ancient kings, wrote a treatise on that science. Besides, if we reflect on the funeral ceremonies of this people, which embowelled, and to a degree dissected their dead, it is not probable that they would not have directed their inquiring minds into the structure and mechanism of the human body.

Among the illustrious men who invented or carried the arts to great perfection, ancient authors and poets mention, with the most renown, Amphion, the celebrated musician, who is said to have built the walls of Thebes by the sound of his lyre; Hyaguis, a famous Phrygian performer on the flute; Marsyas and Olympus, his disciples; Tamiris, the finest singer of his

time; and Dædalus, the celebrated artist, who excelled in architecture, sculpture, and mechanism, who may be considered as the type of the liberal arts, of which he was the inventor, or at least the earliest improver, and to which he has given his name, "Dædalian arts." Among the productions of this artist, Pausanius mentions several which he had seen, and particularly alludes to a species of throne which was at Corinth; a naked Hercules, carved in wood, placed near the temple of Venus Chalinitis; another also of wood, erected in the temple of Hercules at Thebes; and a figure of Trophonius. They also had a Britomartis at Olynthus, a city of Crete; a Minerva; and a representation of a chorus. Among other eminent artists of this time are, Memnon of Syene, a painter and sculptor; Epeus, no less celebrated, and who executed a Mercury in wood, which the Corinthians regarded as a masterpiece of art; but the work for which he was more particularly celebrated was the wooden horse, by means of which the Greeks entered Troy. This fable, of which so much is made in Homer and other poets, is probably a poetical licence, founded upon the circumstance of the battering ram, which had probably the head of a horse, and of which Epeus is said to have been the inventor. Cadmus should not be omitted, who left Phœnicia to found the city of Thebes, which he named after Thebes in Egypt, his native country; and who enriched his new city with three statues of Venus, carved from the materials of the vessels in which he had crossed the sea. This circumstance proves that Greece was peopled from Egypt and Phœnicia.

V. *The fine arts among the Greeks.* Art begun now to enlighten the colonies of Greece, and like a bright star shone over the whole country with such benignant rays, that it soon, in that happy climate, roused the energies of the people to the highest point of perfection. Nature, in Greece, did not exhaust itself in gigantic productions, and the genius of man was never abandoned to mere flights of imagination; without utility it did not seek for grandeur in the extension of dimension, but found it in exact proportion, which being in perfect harmony in all its parts, has fixed in an invariable manner the rules of taste; and if the Greeks were at first the disciples of the Egyptians, they were soon as much their masters in the production of the fine arts as they are ours.

It may be inquired why, in so short an interval as exists between the times of the Egyptians and the Greeks, such a difference in favour of a fine style should exist? In the former country, restraints on art by law, religion, and policy, operated to depress it, or keep it from rising above its earlier attempts; which causes also affected in a great degree the arts of the ancient Israelites. While, on the contrary, in Greece the arts, free as the air the natives breathed, grew and prospered in all the gay and unrestrained luxuriance of unfettered liberty. All the country of ancient Greece, that is to say, Macedonia, Thessaly, Greece properly so called, the Peloponnesus, and the Grecian isles, with the after additions of Epirus and Illyrium, encouraged and patronized the arts, but not all with equal ardour or with equal success. The religion of Greece, abounding with all the splendour of mythology, presented the most captivating and favourable subjects to form the brilliant imagination of the poet, the painter, the architect, and the sculptor. Their form of government was most favourable to the fine arts; and their manners and customs, the aliment of a fine and manly taste, gave them that purity of style and amenity of form for which the arts of Greece are so preeminent.

The arts of Greece were much influenced by their mythology, they worshiped twelve principal deities, and named them Ζεὺς Jupiter, Ἥρα Juno, Ποσειδῶν Neptune, Ἄρης Mars, Ἀπόλλων Apollo, Ἑρμῆς Mercury, Παλλὰς Minerva, Ἄρτεμις Diana, Δημήτηρ Ceres, Ἀφροδίτη Venus, Ἥφαιστος Vulcan, Ἑστία Vesta. The inferior order of deities were the genii and heroes, who after their death were placed among their gods. This multiplicity of deities necessarily occasioned a want of places for their worship, which much extended the domain of the arts. They not only erected temples to their honour, but often dedicated woods and forests to their exclusive service. Two motives led the Greeks to erect these temples, fear and acknowledgment; to implore favours and to acknowledge benefits. These were generally done by offerings, consisting of animals, spoils of vanquished enemies, flowers, and fruits. The arts were not backward in contributing to this sentiment, for vases of bronze, of silver, or of gold, tripods, crowns, altars, candelabræ, &c., were among the dedications of the great and opulent. The numberless festivals instituted in honour of their gods, also opened a vast field for the cultivation of the genius of the arts. Some of these festivals were celebrated every year; some every five years, as the feasts of Eleusis; some every nine years, as the Daphnephoræ. The Panathenæa was one

of the most important of these feasts or mysteries, and was sacred to the worship of Minerva. They were founded by Ericthonius, and originally called Athenæa, but becoming much neglected, they were re-established and much augmented by Theseus, who wished not only Athens, but all the cities of Attica should join in their celebration; and from Πᾶν (all) they received their additional epithet, and became Panathenæa. The foregoing causes, and the frequency and splendour of the public games, concurred in bringing to perfection the arts of Greece; and their decadence may be dated from the time when the celebration of public games occurred less frequently. The Lacedemonians, that rigid and virtuous people, however simple and plain might be the exterior of their private dwellings, were not deficient in elegance and convenience, either of works of art, or of furniture within. Desiring a beautiful and healthy race of children, without deformity of limbs or features, they embellished the chambers of their females with the most exquisite models of beauty and fine forms, that their wives, having their imaginations filled with ideas of beauty, might bring forth a handsome race of children. Thus did all the cities of Greece, particularly Athens, encourage the genius of the peaceful arts, which has given immortality to heroes, and has ennobled even voluptuousness. The people of Greece consecrated woods, and dedicated temples; and the arts peopled them with images of the gods. This is a slight and rapid sketch of some of the causes which have contributed to raise the arts of Greece to such perfection; causes which could not but have been favourable to them, as they always flourish best when unfettered; and when a people by a state of freedom and liberty are fit for their reception, they are seldom backward in offering their contributions on the shrine of independence.

Before this article is dismissed, it may not be improper or uninteresting to name some of the principal of those eminent artists of Greece, who have conferred such lasting honours upon their country. Cleanthes and Ardices, painters of Corinth; Telephanes and Cleophantus, names mentioned by Pliny as painters, who flourished before the days of Homer; Bularchias, called by Pliny, "Pictor præstantissimus," is the first who may be placed in a less uncertain epoch, because Candaules, the King of Lydia, who purchased his celebrated picture of the combat of the Magnesians, was assassinated by Gyges, about seven hundred years before the Christian era; Hygiemon and Dinias, which last was celebrated for monoctoromes, or pictures of one colour; Charmades, who is said to have been the first who distinguished the sexes in painting. According to the account of Pliny, much advance was made in this art by Eumarus, and Cimon, a pupil of his, who first gave motion and attitude to his figures, marked the articulation of the bones and muscles, and dressed his figures with grace and elegance. Between Phidias and Zeuxis, are several celebrated names, and the art was now fast advancing to its glory and the memorable epoch of Apelles. Panænus, brother of Phidias; Polygnotus of Thasos, valdè notus; Apelles of Cous, pictor eximius; Protogenes; Antiphilus, the noble rival of Apelles; Nicophanes, victor illustris; Nicomachus; Micon, who painted the Pœkile; Dionysius of Colophon; Aristides of Thebes, the first painter who attempted to express the passions; Parrhasius of Ephesus, Timanthes, both rivals of Zeuxis, the former of whom obtained the mastery. Apollodorus of Athens and Zeuxis were among the principal painters of this day.

VI. *The fine arts among the Romans.* The arts were looked upon in a different light among the Romans to what they were among the Greeks; the latter loved and cherished them, because they conferred honour and dignity on their country; the former suffered them because they embellished their empire. In Greece no man was disgraced by following the profession of an artist; in Rome it was the business of slaves; with one the arts were an object of love and desire; with the other, of convenient decorative necessity. In the early period of the Roman history, as well as of every other rising nation, except the Greeks, the arts were not much encouraged; as from the expulsion of the Tarquins, to the close of the third Punic war, the most illustrious and considerable families in Rome affected an austerity of life, which bore more the appearance of vanity than a real love for virtue. This ignorance of the beauties of the fine arts among this warlike people, lasted for several centuries; in short, till having no more countries to conquer in the interior of Italy, they began to explore the seas, and penetrate into the fertile regions of Sicily, where they were struck with amazement at the pomp and grandeur of the cities, and the beauties of the works of art in these highly cultivated regions. With such customs, laws, and dispositions, the Roman people were not

very likely to make the fine arts flourish rapidly. As a proof, the example of their affixing the epithet or cognomen, *Pictor*, to a branch of the Fabian family, and perpetuating what they esteemed his disgrace for having derogated from his nobility, by practising the art of painting. Rome was for a long time the prey of civil wars, and of course the arts did not rise above a necessary mediocrity till the more settled times of Augustus. The tyranny of Nero, whose name, branded as it is in every light by which he is viewed, to the painter Amulius, who decorated his golden palace, must have checked the growth of art, and will ever be held in detestation. The arts flourished under Vespasian and Titus, who were both men of liberal sentiments and greatness of mind; but the parsimony of Galba, the short reign of Otho, and the odious debaucheries of Vitellius, were every way unfavourable to their advancement, and they consequently declined. Rome did little more than acquire a reputation for the possession of the Laocoon, the Apollo, the Venus, and other masterpieces of foreign art. It is not for the mere possession of great monuments of art, wrought by others, that a people will deserve the gratitude of posterity, or obtain a reputation for originality or greatness in art. On the contrary, to have created, cultivated, and brought to perfection a fine style, is of more real dignity than having the possession alone of all the masterpieces in art that the world has ever produced. The rest of the history of the fine arts, being more defined, and on more positive data, may be found in distinct treatises, and are therefore not considered in this brief sketch of the fine arts among some of the earliest natives of antiquity. See SCHOOL, ARCHITECTURE, PAINTING, SCULPTURE, ACADEMY, &c. &c.

ARUNDELIAN MARBLES. *In the archaiology of sculpture.* A series of ancient sculptured marbles, discovered by Mr. William Petty, an ancestor of the Lansdown family, who travelled and explored, sometimes at the risk of his life, the ruins of Greece, the Archipelago, and the shores of Asia Minor, at the expense of, and for Thomas Howard, Earl of Arundel, who lived in the time of James and Charles the first, and devoted a large portion of his fortune to the collection of monuments, illustrative of the arts and of the history of Greece and Rome. The noble Earl himself had resided for a long time in Italy, where he had frequent opportunities of adding to his store; but not satisfied with his own unassisted exertions, he employed Mr. Petty and other men of enterprise and learning to travel, at his expense, in search of such treasures.

These marbles, named in honour of their noble collector, arrived in England in the year 1627, with the rest of the collection; which, a writer in the Encyclopædia Metropolitana, says, consisted of thirty-seven statues, one hundred and twenty-eight busts, and two hundred and fifty inscriptions; together with a large number of altars, sarcophagi, fragments of sculpture, and an invaluable assemblage of gems. The inscriptions were inserted in the walls of the garden at the back of Arundel House in the Strand, and were examined, soon after they had been placed there, by the celebrated John Selden and two other scholars, at the recommendation of Sir Robert Cotton. Those learned men deciphered twenty-nine of the Greek and ten of the Latin inscriptions, selected from those which Selden thought to be of the greatest importance; and in the following year he published them, in a thin folio volume, under the title of *Marmora Arundelliana*, 4to. Lond. 1628.

The noble family of Arundel being obliged to abandon the mansion during the civil wars, the parliament put it under sequestration, and suffered the collection of marbles, deposited in its garden, to be plundered and defaced in a shameless manner; and it is supposed that not more than half of the original number escaped destruction. The remainder of these inestimable relics were presented by Henry Howard, Duke of Norfolk, grandson of the collector, to the University of Oxford, where they still remain. The whole collection were published in 1676, by the learned Humphry Prideaux, Dean of Norwich. They were again printed under the control of Michael Mattaire, and subsequently, in a more exact and splendid manner by Dr. Chandler, the celebrated archaiologist, in 1763.

These inscriptions are records of treaties, public contracts, thanks of the state to patriotic individuals, sepulchral, and many entirely of a private nature. The most curious and interesting is one usually known by the name of "the Parian Chronicle," from having been kept in the island of Paros. It is a chronological account of the principal events in Grecian, and particularly in Athenian history, during a period of one thousand three hundred and eighteen years from the reign of Cecrops, B. C. 1450, to the archonship of Diognetus, in the year before Christ, 264.

The authenticity of this Chronicle has

been called in question by Mr. Robertson, who in 1788, published an essay entitled "*The Parian Chronicle.*" These objections have, however, been fully and ably discussed, and the authenticity of this curious ancient document, vindicated by Professor PORSON, in his *Review of Mr. Robertson's essay*, in the *Monthly Review* of January, 1789, p. 690, which is republished in Porson's Tracts by Kidd, p. 57; and also in SELDEN'S *Marmora Arundelliana;* in the *Marmora Oxoniensia; Mémoires de l'Acad. des Inscriptions*, vol. xxvi. p. 157; LENGLET DUFRESNOY, *Tablettes Chronologique*, vol. i. p. 29. ed. 1778, 12mo.; HEWLET'S *Vindication of the Parian Chronicle; Archæologia*, vol. ix. No. 15; BREWSTER'S *Encyclopedia;* and in the English lexicon of THE ENCYCLOPÆDIA METROPOLITANA, article *Arundelian Marbles*, where Mr. Robertson's objections, entitled "*The Parian Chronicle,*" Lond. 1788, are stated and answered seriatim.

ASHLAR. *In architecture.* Free stone as it comes from the quarry. It is a term more generally applied to slabs of stone, from six to nine inches in thickness, used for facing brick buildings, worked in imitation of regular courses of solid masonry, with mouldings, dressings, &c.

ASHLER or ASHLERING. *In architecture.* Quartering of timber placed perpendicularly from the floor of the attic story, to the rafters of the roof, where rooms are intended to be formed in the roof, to obviate the useless acute angle formed by the junction of the roof and the floor.

ASIATIC. See ARCHITECTURE, Persian, Indian, Chinese, &c.

ASPASIA. The daughter of Hermotinus, a Phocian. She was celebrated for her wit and resplendent beauty, was at one time the mistress of Cyrus, and afterwards beloved by Alexander. There is a fine terminal bust of this celebrated woman in the British Museum.

ASPECT. [*aspectus*, Lat.] *In architecture.* Direction toward any point; disposition of a building in regard to any thing else. The aspect of a house and particularly of the principal rooms, demands the greatest attention from the architect, and most so in bleak or exposed situations. The south-east is generally the best for Britain; and the south and due east the next best. The south-west Mr. Humphrey Repton considers the worst, because from that quarter it rains oftener than from any other; and the windows are dimmed and the views obstructed by the slightest shower, which will not be perceptible in the windows facing the south or east. A north aspect is gloomy, because deprived of sunshine; but it deserves to be remarked, that woods and other verdant objects look best when viewed from rooms which have a north aspect, because all plants and trees are most luxuriant on the side next the sun. A north aspect is also the best for a study or artist's painting room, on account of the clearness and steadiness of the light. An aspect due east is considered by Repton to be nearly as bad as the north because there the sun shines only while we are in bed; and the aspect due west is intolerable, from the excess of sun dazzling the eye through the greatest part of the day. "From hence we may conclude," says he in his fragments on landscape gardening, &c. "that a square house placed with its front duly opposite to the cardinal points, will have one good and three bad aspects."

Aspect is also understood in ancient architecture for the manner of distributing the parts of the sacred buildings or temples, and are divided by Vitruvius into seven orders: first, the Antis; second, the Prostyle; third, the Amphiprostyle; fourth, the Peripteral; fifth, the Dipteral; sixth, the Pseudodipteral; and seventh, the Hypæthral. See these several words in this Dictionary, and in Elmes's Lectures on Architecture, page 216.

ASSISI. *In the history of architecture.* An ancient city of Italy, near Spoleto in Umbria, where are the ruins of a temple dedicated to Minerva, built about the time of Augustus. The portico consisted of six fluted Corinthian columns, each having a distinct pedestal, but otherwise in good proportion and taste. It is now used as the portico of the church of Santa Maria di Minerva. In the neighbourhood of Assisi are other vestiges of Roman magnificence; ruins of baths, temples, and an aquæduct.

ASTRAGAL. [ἀστράγαλος, Gr. *astragalus*, Lat.] *In architecture.* A small compound moulding consisting of a torus, a fillet, and a hollow which separates the shaft of the column in the Corinthian and Composite orders from the capital; and used in some Roman examples of the Doric and Ionic orders, and in the Tuscan. Its origin was doubtlessly to conceal the junction of the two parts. Its etymology is derived from its resemblance to the bone of the heel, called *astragalos*, and is thence called by the French architects, *talon.* When applied round the necking of the column as in the Tuscan and Roman doric orders it is more properly called from its office and situation, *Colarino.* See that word.

ASTY. [Ἄστυ, Gr. *urbs*, Lat.] *In the history of architecture.* A town or city. The

name of that part of Athens which encircled the acropolis, and is so called in contradistinction thereto. The word is used by Vitruvius in describing the temple of Jupiter Olympius, which he says is situated in *Asty*, the city. The words of Vitruvius *(in Præf.* lib. vii.) are "In *asty* vero Jovem Olympium amplo modulorum comparatu, Corinthiis symmetriis et proportionibus architandum, &c. &c. The translation by Daniel Barbaro renders it, "In *asti* si dice ancho, che Cossutio si pigliò la impresa di far Giove Olimpio con aplisscini moduli, e di nusure, e proportioni Corinthii, &c. &c. Mr. Wilkins has also used the word in the sense here given in his Atheniensia; and says, in a note to the translator of the Athenian inscription, "The acropolis was anciently called ἡ πόλις, the city (Pausan. i. 26). When the habitations had begun to spread around the foot of the rock, the new city was called *Asty*, in contradistinction to the citadel, Τὸ ἄστυ τήν τε Ἀθήνας προσηγόρευσε. Plut. in Thes. See ACROPOLIS.

ATHENÆUM. [ἀθήναιον, Gr.] *In architecture.* A public building erected for rehearsals, lectures, &c. denoting its name from Minerva (Ἀθηναία), who as the goddess of wisdom was supposed to preside over it. In ancient times they were used as theatres, where the professors of the liberal arts held their assemblies, the rhetoricians declaimed, and the poets rehearsed their performances in public. The most celebrated of these buildings was the principal one at Athens, which named the rest. Hadrian built one in Rome in the year 135 of the Christian era; Caligula one at Lyons, which still gives its name to a literary society of that city. In modern times, the name *Athenæum* has frequently been conferred upon establishments connected with literature and art, as the above named society at Lyons, and a very flourishing institution at Liverpool.

ATHENIAN. [from Athens.] *In all the arts.* Relating to or after the manner of the people of Athens. See ACADEMY, ARCHITECTURE, PAINTING, SCULPTURE, SCHOOLS, &c.

ATHENS. [Ἀθῆναι, Gr. from Ἀθηναία, Minerva.] *In the history of the arts.* A celebrated city, the capital of Attica, founded by Cecrops, a native of Sais in Lower Egypt (Diod. lib. i. p. 33), and originally named Cecropia; afterwards Athens from its patroness. Athens was in its flourishing days the most celebrated seat of learning and the arts in the world, and was called by Cicero, "Omnium doctrinarum inventrices Athenas;" and in another place "unde humanitas, doctrina, religio, fruges, jura, leges ortæ."

Before the days of Cecrops, little is known of the state of this city. From Ogyges, who is placed by most chronologers, one thousand eight hundred and fifty-six years before Christ, Attica received the the name of Ogygia. Between this leader and Cecrops, a contemporary of Moses, several kings are named, but their history is quite unknown. To Cecrops, however, is Athens indebted for her complete establishment; he introduced the building of altars and temples, the offering of sacrifices to the gods, and first enacted marriage and other social laws and customs. The arrival of Cecrops, with a colony of his countrymen the Egyptians, is a farther proof of the origin of Grecian architecture. See ARCHITECTURE.

After the death of Cecrops there was a succession of sixteen kings. Among whom Erectheus VI. (Apollod. lib. iii. p. 198, et seq.) or Ericthonius raised a statue of olive wood to Minerva, in the Cecropia (the rock of the acropolis), and instituted festivals called Athenæa, to be celebrated in honour of the goddess, by the twelve cities of Attica. The spot in the Cecropia where he was buried still bears the name Erectheium. From Erectheus to Theseus, the history of Athens offers little that is remarkable in art; but the latter, the chief of a race of heroes and philosophers, is identified with all its greatness. By him the city was enlarged and adorned (Isocrat. Plut. p. 11), he erected it into the metropolis of Attica, established the Prytaneium, a court of judicature for the whole province; and instituted sacred festivals, the Panathenæa to be kept in the Erectheium every five years. Under his administration the power and population of Attica, and particularly of Athens, materially increased; the government was concentrated, and he deservedly obtained the title of the second founder of Athens. For these and other public services, on his return from Crete they erected and dedicated several temples to him; he accepted four, and made them dedicate the rest to Hercules his kinsman. The principal of these structures is that known by the name of the temple of Theseus, which contains in the Metopes of the eastern front ten of the labours of Hercules, and on the returns of the portico eight of the achievements of Theseus himself. This temple is a fine example of the Doric order in its greatest purity; and casts from twenty-four of its metopes are among the invaluable collec-

tion of Athenian antiquities in the British Museum, for which our country is indebted to the Earl of Elgin. These beneficial changes in the government and affairs of Athens, are assigned by the best authorities to about the year 1300 before Christ.

The Pelasgi, a people of uncertain origin, increased the strength of the city by the fortifications of the Acropolis. It is to them that the beautiful specimens of polygonal masonry, which are still to be found in the ancient fortresses of Greece, and in parts of Italy, are commonly attributed. In the long interval between the settlement of this people, and the usurpation of the enlightened and magnificent Peisistratus there is not much of the progress of the arts to record. To this eloquent and learned Athenian is Athens indebted for its first library and many elegant public buildings. He proved himself a great patron of literature and of the arts; he was the intimate friend of Crotoniates the epic poet, who wrote the adventures of the Argonauts; and there is good reason to suppose, says the author of the article Pisistratidæ in the Encyclopædia Metropolitana, that the celebrated fabulist Æsop was his friend and favourite. He founded the celebrated temple of Apollo Pythias, and to him and his sons Athens owes much of her early grandeur; they founded the temple of Jupiter Olympus, and it was Peisistratus who claims the honour of having digested the works of Homer into the form under which they now appear.

Hipparchus, who reigned conjointly with his brother Hippias, succeeded his father. Hipparchus was distinguished for his love and patronage of art and literature, and was himself a considerable scholar. Simonides, the elegiac poet of Ceos was a peculiar favourite, and he despatched a galley on purpose to bring the celebrated Anacreon to Athens. At the Panathenæa he caused the bards to sing all the poems of Homer, that the Athenians might be instructed and entertained by them. He also caused several statues of Mercury to be erected in various parts of the city, inscribed with laconic sentiments of truth and virtue.

The invasion of Athens by the Persians under Xerxes, occasioned the entire destruction of their city, which was the object of the most mighty armament which is known in the history of mankind. After this complete destruction of the rising city of Athens, it arose from its ruins on an enlarged and improved scale; and the wealth derived from their maritime possessions and extensive commerce was employed during the fifty years between the victory of Salamis and the breaking out of the Peloponnesian war, in the embellishment of the city of Minerva. Herodotus (ix. 13.) asserts that after this invasion, so completely was the work of destruction carried on, that every street and building was to be restored, from their very foundations. This, however, is not literally true, for in the time of Pausanias there remained several monuments anterior to the date of the Persian war; but the devastation was sufficiently great to occasion the future Athens to be called a new city.

The restoration of Athens commenced under the administration of Themistocles, who restored its military defences. Cimon, with unbounded liberality, used his own private opulence upon public works, and to him Athens and the world are indebted for the temple of Theseus, the Pœkile, the Dionysian theatre, the Stoæ, the Gymnasiæ, and the ornaments of the Academy and the Agora. But to Pericles is the glory due, of making his native city the wonder of nations, and the exemplar of latest posterity. Among the principal of his numerous and magnificent works, are the Ordeium, the Propylæa, and the Parthenon (see ARCHITECTURE). Athens was in the days of Pericles at her utmost pitch of glory and greatness, and its ruins now, after more than nineteen centuries of desolation, decay, and misfortune, show its former magnificence by its present grandeur, although in dust.

The various misfortunes that befell this beautiful city were the Peloponnesian war, which did but begin in Petto the work of destruction. The size of the Macedonian empire diminished the power of Athens, but did not affect her arts, as additions were even made to her public buildings, even when under the control of a Macedonian governor and garrison. The first severe blow which Athens received was from the Macedonians under Philip, for her fidelity to the Romans. The fury of the invader directed itself to the ravage of the suburbs and the surrounding country. The Cynosarges (hospital for bastard children) and the Lycæum, every retreat of pleasure and sanctuary of devotion, shrines, temples, images, and tombs were rudely overthrown; and the precious marbles with which Attica abounded, and which would not yield to fire, were broken and crumbled to dust by the impotent rage of the barbarian (Liv. xxxi. 24). Sylla again attacked and ravaged this sanctuary of the arts. He levelled the Peiræic for-

tifications, destroyed the long walls and arsenal of Philo, plundered Epidaurus and Olympia, felled the groves of the Academy and the Lycæum, and violated the sacred deposits of Delphi. (Plutarch in Vitâ Syllæ.)

Athens, however, still remained the depository of science and the school of arts; and although during the civil convulsions of Rome the Athenians adhered to Pompey, yet they had to enumerate Julius Cæsar as among their greatest benefactors, for he contributed to the erection of the Propylæa to the new Agora. Brutus, Cassius, Anthony, and Augustus, conflicting and opposite as were their parties, interests, and enmities, were all patrons of Athens, and were all publicly acknowledged as such.

But of all the emperors Hadrian was the greatest benefactor and patron which Athens enjoyed after the downfall of her temporal power. Every part of the city and suburbs of this interesting site abound with monuments of his taste and magnificence; the new portion of which was called after him by the name of Hadrianopolis. By his munificent aid they finished the temple of Jupiter Olympius, which was commenced by Peisistratus, continued by Antiochus Epiphanes, three hundred and sixty years afterwards, and which, on its completion by Hadrian, exceeded in magnitude every other Athenian structure. This great benefactor to the Attic metropolis testified his liberality and attachment to the people of Athens by many other costly buildings, and by large supplies of corn and money.

Great and munificent as were the benefactions of the Emperors, and other public men, private liberality also contributed to its beauties. The horologium in the Agora, commonly called the temple of the winds, was the gift of Andronicus Cyrrhestes. Agrippa constructed a splendid theatre, and the ruins of another, built by Herodes Atticus, are still to be seen at the foot of the Acropolis, towards the south west. The casing of Pentelican marble, with which the same munificent patron of arts covered the seats of the Stadium Panathenaicum, on the southern bank of the Ilyssus was scarcely equalled by imperial prodigality. Under the Antonines Athens attained unrivalled splendour, having been increased by the accumulated patronage of the wealthiest personages in the world for nearly six centuries; and so careful were they of their ancient glories, that Plutarch declares, in his Life of Pericles, that the buildings of his age, notwithstanding this lapse of time, still retained the freshness and bloom of new erections. Pausanias, oppressed, apparently, with the copiousness of his subject, generalizes his account of Athens, when compared with his detailed particulars of other countries which he visited. Strabo, who preceded him, is yet more brief; yet, as eyewitnesses, they have preserved information of the utmost value to the history of the arts.

The decline of Athens proceeded from similar causes as that of the Roman empire; yet it escaped comparatively harmless in the Roman spoliation of Greece. The change of religion from Paganism to Christianity, by the extinction of superstition, destroyed a great portion of the sculptor's employment, and, in many instances, a destruction of the works of art themselves from the violence of early zeal against the emblems of idolatry. The early Byzantine emperors continued their protection to Athens, and when Christianity established itself, the temples were for the most part dedicated to the service of the cross. Even Alaric himself, the Goth, forbore to accelerate the ruin of this city of the arts; and the colossal statue of Minerva Promachus (the defender), still towered in proud magnificence above the eagles of the uninjured Parthenon. The ceremonies of the Romish branch of Christianity had, in other places as well as in Athens, invested the humble mother of the Saviour of the world with the attributes of the virgin goddess of the Greeks; and it was not in Assisi (see this word) alone, that a temple of Minerva was converted by them into a Christian church, dedicated to Santa Maria Minerva. St. Peter also was decorated with the beard and locks of Jove, and St. George of Cappadocia became an equivalent for the Athenian Theseus.

For ages after this, and during the government of the Franks, we at present know but little. It dwindled from metropolitan splendour into a provincial insignificance, and sunk into complete degradation when Omar, in 1436, took possession of its citadel in the name of the victorious Mahommed. While Athens remained under Turkish despotism, three short days of modern warfare, conducted by a people renowned for their love of and skill in arts, inflicted more injuries upon the works of Pericles than had been caused by repeated conquests; and the Venetians, under Count Koningsmark, a Swede, struck that blow at their beauties which had been withheld by Romans, Goths, and Turks. In 1687 nine thousand Vene-

tians, under the command of the Venetian Vandal, disembarked at the Peiræeus, erected batteries on the Pnyx, and at the eastern base of the Acropolis. From these they bombarded the citadel and destroyed the temple of victory without wings, which had been used by the Turks as a powder magazine; the frieze of which is preserved in the British Museum. The Parthenon shared a similar fate from a shell which fell into a magazine, and reduced all the middle of the temple to ruins. Athens was surrendered, after this destruction of her chief glories, to the Venetians; who, after a few months occupation and destruction of other treasures of art by the idle vanity of the Doge Morosini, and the carelessness of his followers, were compelled to abandon their conquests, and the crescent once more soared triumphant over the Acropolis.

For a long time after this event Athens attracted but inconsiderable attention, and little was known concerning its antiquities in Europe. One learned Theban called the temple of Minerva the Pantheon; others, among whom was the French ambassador to the Porte, spoke of it as the temple of the unknown God mentioned by St. Paul; and the ambassador, although he had actually visited Athens, described the Parthenon as an oval. The first accurate idea which the people of Europe received of the Athenian antiquities was given by the publication of Dr. Spon and Sir George Wheler, who both fortunately travelled before the Venetian siege. See ARCHITECTURE.

Travellers to Athens became now more numerous, and particular in their descriptions. In 1751, Stuart, surnamed the Athenian, employed three years, assisted by Messrs. Pars and Revett, in studying and drawing from the principal antiquities in Athens. In 1764 the Dilettanti Society of London employed Dr. Chandler, a learned and investigating man, in the examination. Le Roi also visited Athens about the time of Stuart, and foisted erroneous accounts and delineations of them upon the public. The works of these travellers are all before the public, and are referred to for additional information.

The Earl of Elgin has, however, by his indefatigable industry, skill, and perseverance, conferred an invaluable service upon his country and upon the arts, by placing beyond the reach of destruction many of the most precious relics of the choicest periods of the history of Athenian art; which are deposited in the British Museum, and known by the name of the Elgin marbles, after their noble preserver. This nobleman, on his appointment as ambassador to the Porte in 1799, on the recommendation of Mr. Harrison, of Chester, the distinguished architect obtained permission from the Turkish government to have drawings made and moulds formed of every part of these celebrated monuments of antiquity. His lordship afterwards, on finding their liability to daily destruction, by which they would soon have been lost to the world, removed them by the same permission to England, and disposed of them to the government for £35,000, by a grant of parliament, who have deposited them for the use of artists and the gratification of the public. See ELGIN MARBLES. For an interesting account of the removal of these interesting fragments of ancient art, the reader is referred to a "*Memorandum on the Subject of the* EARL OF ELGIN'S *Pursuits in Greece*," 8vo. Lond. 1815. This work is generally attributed to the pen of Wm. Hamilton, Esq. the learned author of Egyptiaca, and secretary to Lord Elgin's embassy. To the articles "ATHENS" and "THE PEISISTRATIDÆ," in the ENCYCLOPEDIA METROPOLITANA, to which the author of this work is indebted for much valuable information. *A Letter from the Chevalier* ANTONIO CANOVA; *and two Memoirs read to the Royal Institute of France, on the Sculptures in the Collection of the Earl of Elgin, by the Chevalier* E. Q. VISCONTI; *translated from the Italian and French*, 8vo. Lond. 1816. ATHENIENSIA, *or Remarks on the Topography and Buildings of Athens*, by WILLIAM WILKINS, A.M. F.A.S. 8vo. Lond. 1816. R. CHANDLER'S *Travels in Asia Minor and Greece*, 2 vols. Lond. 1817. THE ELGIN MARBLES, *selected from Stuart and Revett's Antiquities of Athens; with the Report of the Select Committee of the House of Commons*, 4to. Lond. 1816. M. DE CHOISEUL GOUFFIER, *Voyage Pittoresque de la Grèce*, 2 vols. fol. Paris, 1782—1809. *The Antiquities of Athens, measured and delineated*, by JAMES STUART, F.R.S. and F.S.A. and NICHOLAS REVETT, painters and architects, 4 vols. fol. 1768. *The Topography of Athens*, by Col. LEAKE, with an excellent Map, to which the student is particularly referred for much valuable information.

ATLANTES. [ἄτλαντες, Gr. from τλάω, I bear, *and probably from* ATLAS.] *In architecture and sculpture.* A word used by Vitruvius for the figures of men, placed in the stead of columns to support the entablatures. See CARYATIDES.

ATRIUM. [from ἄτριον *according to Scaliger, Scil. Area subdiales* ante ædes, *and ac-*

cording to Barbaro and others, from Atria, a town of Tuscany.] *In ancient domestic architecture.* A court yard or portal open to the air in the front of a dwelling. The *atrium* must not be confounded with the *vestibulum,* for the former, according to Vitruvius, was a species of covered portico, composed of two rows of columns, which formed two narrow aisles and a wide centre. It was situated between the *cavædium,* which was similar to the modern court or quadrangle, and the tablinum or cabinet. Vitruvius gives different rules for the proportions of the length and breadth of the atrium. It was in this apartment that the Romans were used to place statues of their ancestors, to keep their table plate, and furniture, and sometimes to dine.

Attic. [Ἀττικός, Gr. *atticus,* Lat.] *In the history of the arts.* Of or belonging to the Attics or Athenians. *In architecture.* An upper story or false order, of dwarfish proportions, placed on the summit of a real order, is called an attic story, or an attic order, probably because from concealing the roof it imitated the buildings of Attica, which were without, or with very flat roofs, for there are no attics existing in the ruins of Athens. In the best ancient examples the attic order or story was generally formed of pilasters, with capitals and entablatures composed without regard to the rules which govern the regular orders. In modern examples termini, terminal busts, and even caryatides have been used to form the attic of a building. The Roman architects employed the attic, to great advantage, over the entablatures of their triumphal arches. The solidity of their forms compensated for the voids below, and form appropriate pedestals for the chariots and horses with which they were crowned. Their divisions formed also excellent panels for sculpture or inscriptions. If an attic be introduced in an architectural design, it should be so managed as not to appear an afterthought, or, that the building had been raised since its first erection; it should bear a just proportion to the other parts, and is better when the building has a proportionate basement or stylobate, than when the columns or antæ of the principal order are standing on the ground. If windows be required, they should be either circles or as nearly square as possible. An oblong parallelogram also looks better in an attic order than a perpendicular aperture of the same dimensions. The attics of Sir William Chambers, at Somerset House, and of Mr. Soane, in the Lothbury Court of the Bank of England, are cited as good examples of attics.

Attic base. See Base.

Attica. *In the history and archaiology of the arts.* A district of Greece between Achaia and Macedonia, the capital whereof was Athens. This region of ancient Greece is celebrated for its chief city Athens (see Athens), for its quarries of white marble, principally in Mount Hymettus, near Athens, which was also famous for its honey; in Mount Pentelicus, and Laurium, near the Sunium promontory, celebrated also for its silver mines.

Eleusis was the next Attic city in rank to Athens. The road between these two cities was dignified by the title of the sacred way. The temple of Ceres and Proserpine, built of Pentelican marble in the time of Pericles, regardless of expense, stood on a hill above Eleusis. Its dimensions were three hundred and eighty-four feet by three hundred and twenty-five. In this temple the famous Eleusinian mysteries were celebrated. Ten miles to the north east of Athens stood the town of Marathon, immortalized by the victory gained by Miltiades over the Persians. The Athenians erected on the plain small columns, on which the names of those warriors who fell in the battle were inscribed. That which was afterwards raised to Miltiades was only set apart a small distance from the rest: and in the intervals between each were placed trophies, bearing the arms of the Persians. On an eminence near to Marathon and Rhamnus stood the temple of Nemesis, the goddess of vengeance. Her statue was sculptured by Phidias, from a block of Parian marble, which the Persians had brought thither to assist in erecting a trophy of their proposed victory. It was ten cubits high, and was inscribed, not with the name of the artist himself, but with that of his favourite pupil Agarocrutus.

Attitude. [Fr.] *In painting and sculpture.* The position or gesture fitted for the display of some grace, or beauty, or other quality of form. As attitude is of the first importance to the artist, and of primary utility in grouping, a knowledge of anatomy is absolutely necessary to prevent the introduction of constrained or impossible attitudes. An attitude may be fixed or transitory, meditated or accidental, and should be applied with propriety to the action represented, or the figure will be unnatural.

Attributes. [*attributa,* Lat.] *In painting*

and sculpture. Symbols which characterize and distinguish the qualities, rank, and persons of the gods and heroes of antiquity. The settled and known allegorical representations of the ancient poets and artists must be attentively studied by every artist. Their clearness and simplicity are such, that mistakes would be fatal to the composition wherein they are made.

The figures of the ancient deities of the Pagan mythology have always some distinctive attribute to point out their qualities and perfections. Thus the attributes of Saturn are a serpent with a tail in his mouth, representing eternity, and a scythe, of which he was the reputed inventor, having first taught husbandry, as being the destroyer of all things. Those of Jupiter are an eagle and thunderbolts; Neptune a trident and marine productions; Pluto a bident or sceptre of two points, and a crown of iron; Mars a spear; Mercury a caduceus; Momus a cap and mask; Harpocrates, the god of Silence, is represented with his finger on his mouth; Æsculapius has a larger serpent than ordinary to distinguish it from the other serpents which are the usual attributes of other deities who presided over health; Hercules and Theseus are represented with a club; but the principal distinctive character of Hercules is that of immense strength, characterized by greatness of size, smallness of head, thickness of neck, breadth of shoulders and chest, with a great display of rigid and strongly marked muscular power. His other attributes are a lion's skin, representing his conquest over the Nemæan lion, a club, and a bow. The famous Hercules of the Belvedere is represented naked, supporting himself on his club with his right arm, and holding the golden apples of the Hesperides in his left hand behind him. The simplicity and clearness of these attributes are much to be admired, for the story is clearly developed of his reposing from his twelfth and last labour after gathering the golden fruit, and slaying the dragon that guarded them. Bacchus is crowned with ivy, and has a thyrsus or spear pointed with a pine cone; Apollo a laurel and a bow (see Apollo); Vulcan a sledge hammer; Cybele and Rhea a crown of turrets; Juno a crown and peacock; Amphitrite a shell; Bellona a whip of many thongs; Minerva an ægis (see Ægis), and Ceres a sickle. Venus is known by her incomparable beauty, by the presence of Cupid, by a mirror, and when as victrix, with the apple which Paris adjudged to her. The Right Hon. Robert Peel has a fine statue of Venus in this character by Thorwaldsen.

The virtues and other allegorical personifications have also their distinguishing attributes. They should be expressed plainly and forcibly; and, if possible, by a single circumstance. Thus Prudence, the best guide of human actions, has for her attribute a rule or wand; Justice a balance or pair of scales; Fortitude a sword, and sometimes resting on a truncated column; Temperance a bridle to restrain; Health is distinguished by a serpent, and Liberty with a cap on the summit of a lance; Honesty was represented by the ancients with a transparent vest; Modesty as veiled, and Tranquillity as standing firm against a column; Clemency and Peace both bear an olive branch; the Fates or Destinies a distaff; Fortune a rudder, and Devotion is represented as casting incense upon an altar. These and similar distinctions as used by ancient artists, are obvious and conventional. They point out the character and essence of the personification represented in a more direct and intelligible manner than by a variety of symbols; while, on the contrary, a multiplicity and bad choice of attributes, as given by many modern artists to their allegorical personifications, are nothing better than complicated enigmas. Instances of such errors may be witnessed in the royal gardens of Versailles, and even in the collections of Rome itself, with the simple beauties of the ancients before the eyes of the offenders. But the greatest number of these enigmatical attributes and allegories are in the *Iconologia* of Ripa, and in a series of Illustrations of the Emblems of Horace, by Otho Venius, the master of Rubens. Among these odd conceits, Flattery, represented by a female, with a flute in her hand and a stag at her feet, because stags are said to be so fond of music as to suffer themselves to be taken if a flute be played; Beauty by a naked woman with a globe and compasses in her hand, because a true idea of beauty is difficult to be imagined; Fraud by a woman with two different heads and faces, a scorpion's tail and eagles legs, two hearts in one hand, and a mask in the other; Caprice by a man with a pair of bellows and a spur, because the capricious sometimes encourage virtues, and at others strike at them; Liberty with a cat at her feet, because a cat loves liberty. When Horace says "Pede pœna claudo," the artist has represented Punishment with a wooden leg; for "virtus est vitium fugere," he gives Virtue fleeing before seven or eight vices;

and "dominum vehit," a rich man riding upon the back of a poor one; Envy he depicts as feeding upon her own heart; Poverty with a cabbage, and numerous other similar puerilities.

A correct method of composing and selecting attributes is as necessary to the architect as to the painter and sculptor; as by them he may designate the character of his building. In conformity with their general practice, the ancients decorated the friezes of their temples with sacrificial vessels and instruments; affixed an eagle on the ætos or summit of the temples which they dedicated to Jupiter (see ÆTOS); a lyre in the metopes of the temples of Apollo, an example of which is in the classical ruins of Delos; aplustra and spurs denoted the temple to be dedicated to Neptune (see APLUSTRUM); victories, crowns, palms, &c. were used to decorate their triumphal arches; bigæ and quadrigæ were placed on the summits of circuses, stadii, and gymnasii; the Muses and their attributes designated the building to be devoted to poetry and the drama. Thus did a proper choice and adoption of attributes, of which even the orders were included, testify to the spectator and to posterity the usages of every public building. The study and proper selection of attributes and appropriate decorations to buildings has been too much neglected by modern architects, or we should not witness theatres decorated with the sacred Doric, nor churches with the skulls, pateræ, and instruments of the heathen mythology. For further details of this useful subject the student is referred to SPENCE'S *Polymetis*, or an Inquiry concerning the Agreement between the Works of the Roman Poets and the Remains of the ancient Artists, fol. Lond. 1747; RIPA'S *Iconology;* the works of OTHO VENIUS, &c.

AVENUE. [Fr. from *ad venire*, Lat.] *In architecture.* A way to, access, approach. A long walk of columns, arcades, statues, trees, &c. used for the decoration of an approach to a palace or mansion. The avenue, in the hands of a man of taste, is susceptible of great variety and beauty of design.

AVIARY. [*aviarium*, Lat.] *In architecture.* A building erected for the breeding, rearing, and keeping of scarce and curious birds. As luxury increased among the ancient Romans, among other artificial wants they were desirous of obtaining and rearing a variety of rare and curious birds from every part of the habitable globe. The better to train them to the hand, to tame them, and to enjoy their beauties, they were particularly choice in the elegance and conveniences of their aviaries. Varro, in the third chapter of the third book of his work entitled "De Re rustica," says, that his ancestors knew no other birds than fowls and pigeons, which were kept in a court yard; but in his time they built aviaries, to which they gave the Greek name of ὀρνιθών, which were more extensive than even the dwelling houses of former times. He also relates, in the following chapter, that in his days there were two sorts of aviaries, one for containing birds intended for the table, and the other the birds which were kept for their song or plumage. The former sort, like the modern dove-cote, were built entirely for use, but the latter were often beautiful pavilions, with an apartment or saloon in the centre, for the company to sit in and enjoy the melody of the feathered songsters. Lænius Strabo, an opulent and luxurious Roman, is looked upon as the first who introduced aviaries upon an extensive scale, and erected a splendid one at his villa near Brundusium. Lucullus followed this example, and constructed one at his Tusculanum, which far surpassed the former in size and beauty. Varro, however, outshone them both in his ornithological buildings, and built an elegant and spacious aviary at his country house, near Casinum, which he has described (De Re rustica, lib. iii. c. v.), with evident satisfaction. CASTELL (in his Villas of the Ancients Illustrated, page 19), and other authors have endeavoured to throw light, and even to delineate this splendid structure. I. A. DE SEGNER has devoted an entire work *(de Ornithone Varronis)* to it, and GOIFFON has also published "Observations sur la Volière de Varron." Both these tracts are reprinted in SCHNEIDER'S Commentary upon the first Volume of "Scriptores Rei rusticæ." Schneider did not publish the engravings of Segner's work, which, however, were republished in GESNER'S edition of the "Scriptores Rei rusticæ," Leips. 1773; to which Gesner has added a plate of his own conceptions of this celebrated aviary of Varro. In the "Recueil de Mémoires concernant l'Architecture, pour l'année 1800, is a letter from M. Rode to M. Hirt on the occasion of a publication by the latter, entitled "une Dissertation sur la Volière de Varro à Casinum," and M. Hirt's reply, which throw considerable light upon the subject. M. STEIGLITZ, a German archaiologist of great attainments, has also given a dissertation and description of his ideas upon the same structure in the third

volume of his "Archæologie de l'Architecture des Grecs et des Romains;" for which see pp. 274 to 28, and plate 36.

Aviaries of modern times have never equalled the splendour and extent of those of the Romans; yet the aviary at Wooburn Abbey, a seat of the Duke of Bedford, is comparatively of great extent and value; the pheasantry at Goodwood, near Chichester, the residence of the Duke of Richmond, is spacious, and once was elegant. A beautiful pavilion at one extremity of it, which commands extensive and delightful views, contains, on the ceiling, an excellent copy of Guido's Aurora, and many other subjects on the walls, tastefully arranged in stucco framed panels. They are, however, much dilapidated by decay and neglect. At Malmaison also, one of the palaces of the late Emperor Napoleon, was a very fine aviary, the plan and design of which was copied from one of the pictures at Herculaneum.

AUGUSTALES. [Lat.] *In archaiology.* The title of the flamens or high priests, who were appointed to sacrifice to Augustus after his deification. Also the ludi or games instituted by universal consent of the people, and celebrated in honour of the same prince on the fourth of the ides of October (the 12th of our computation). Dio, *lib.* 5, 6; Suet. *calig.* 5, 6.

AUGUSTALIA. [Lat.] *In archaiology.* A festival instituted by the Roman people in honour of Augustus Cæsar, on his return to Rome, after having made peace in Sicily, Greece, Syria, Asia, and Parthia; on which occasion they erected an altar to him, inscribed *Fortunæ reduci.* Ibid.

AUREOLA. [Lat.] *In painting.* The old painters called by this name the crown of glory with which they adorned the heads of the saints, martyrs, confessors, &c. But the aureolus was originally a jewel, which was proposed as a reward of victory in public disputes.

AURORA. *In the archaiology of painting.* A daughter of Titan and Terra, the goddess of the morning. Hesiod, however, makes her the daughter of Hyperion and Thia, and sister of Sol and Luna. Homer describes her very poetically, and Guido has painted her, in his celebrated picture, with a kindred spirit. This first of poets distinguishes her as rosy fingered, and names her two horses Lampus and Phæton. Virgil assigns her a car with four horses, and calls them rosy, but Theocritus calls them white, and Lycophron gives her Pegarus as a courier.

AUSTERE. [αὐστηρός, Gr. *austerus*, Lat.] *In the criticism of the arts.* A severity or dryness of style; equally applicable as an epithet to a composition in painting, sculpture, architecture, and engraving. Austerity in art, if not carried to a vicious excess, which becomes dryness and poverty, in general prescribes correctness in design, firmness in execution, simplicity in composition, rejecting every unnecessary ornament, correctness more than suavity or brilliancy of colouring. Truth is more its object than effect; and although differing from severity, as going beyond that quality in the rejection of all extraneous ornament, it is nearly allied to it.

AUTHORITY. [*authoritas*, Lat.] *In all the arts.* Countenance, warranty, testimony. Certain works of art; certain artists whose preeminence entitles them to the rank of masters; and certain ages of the world are properly taken as *authorities* in all matters of art. In painting the great works of Michael Angiolo, Raffaelle, the Caracci, Rubens, and other great masters are the standards of authority. In sculpture, the works of Phidias, the marbles of Lord Elgin, and the ancient statues of Greece and Rome. In architecture, the splendid ruins of Attica and Rome; and in engraving the best of the ancient and modern masters.

AUTOMATON. [αὐτόματον, Gr. *automatum*, Lat.] *In mechanical sculpture.* A machine or figure that possesses apparently a spontaneous motion. When automata are made to resemble human figures, they are called *Androides;* all other automata are classed according to their respective uses or forms. The earliest mention of automata is in Homer; who describes Vulcan as being occupied upon them, when Thetis went to Vulcan to beg arms of immortal proof for her son Achilles. "He had made twenty tripods to stand beside the wall of his well-founded palace. Under them he placed golden wheels, on the bottom of each, that of their own accord they might enter the heavenly meeting, and again return to his house—wonderful to be seen." Iliad xviii. v. 374, 375. Plato and Aristotle (Mænon, 426, Eutyphron, 8. ed. Francfort, 1602) both mention statues being made by Dædalus which could not only walk, but which it was necessary to tie in order to prevent them from moving. The latter speaks of a wooden Venus of this kind. Many wonderful things have been related of the power of the ancients in making automaton figures, and the moderns have certainly in the famous chess player, the flute player of Vaucanson, the Androides of Maillardet, and other ingenious works, fully equalled them. For a very interest-

ing account of Automata, the reader is referred to the Encyclopædia Metropolitana, part vii.; Beckmann's History of Inventions; "An Attempt to Analyse the Automaton Chess Player," 8vo. Lond. 1821.

Axe. [eax, Sax. ἀξίνη, Gr. *axia* or *ascia*, Lat.] *In practical architecture.* A carpenter's tool, consisting of a long wooden handle, and a metal head with a sharp edge.

Axe, Battle. See Battleaxe.

Axis. [*axis*, Lat. ἄξων, Gr.] *In architecture and sculpture.* A real or imaginary line passing through the centre round which it may revolve. The axis of a column is a straight line drawn through its centre; that of the Ionic volute is a line drawn through the eye to the circumference both ways; and a spiral axis is the centre of a twisted column drawn spirally to answer the circumvolutions.

Azure. [Fr.] *In painting.* A light or sky-coloured blue. This word is presumed to be derived from the Arabic *lazul*, which has the same meaning. The fine sky colour of lapis lazuli, and the pigment made from it, called ultramarine, are of the greatest use to painters, both in oil and water colours. See Ultra Marine. In herald painting *azure* means the blues in the arms of any persons below the rank of baron. In engraving, this colour is always represented by regular horizontal lines.

B.

Baal. *In archaiology.* An ancient idol whose emblem was at first a bull. The earliest idolaters worshiped the solar fire, which they supposed to be the ruling principle of the universe; the word Baal signifying ruler. Baal, Belus, or Bel, was the principal god of the Carthaginians, Sidonians, Babylonians, and Assyrians; and as he was supposed to delight in human sacrifices, he was probably the same as the Moloch of the Ammonites, the Κρόνος of the Greeks, and the Saturn of the Romans. High places were always chosen for the temples and altars of Baal, in which was preserved a perpetual fire. His priests were numerous and the worship of the idol frantic and ferocious.

Baalbeck or Balbeck. *In the history of the arts.* An ancient city of Phrygia in Cœlosyria, below Antilibanus, formerly called Heliopolis, or the City of the Sun. The Grecian and Roman historians do not afford much information concerning this once flourishing town. Although it possessed such striking ruins of ancient art, it was scarcely known to Europeans till about the end of the seventeenth century, when some English merchants, being at Aleppo, had the curiosity to witness how far Arabian recitals concerning its magnificence were true. Yet it was not till the publication of "The Ruins of Baalbeck," by Messrs. Dawkins and Wood, in 1757, that the public were enabled to form opinions upon its beautiful remains of architectural and sculptural magnificence.

If an opinion is to be formed concerning the date of the extraordinary buildings whose ruins are to be found at Baalbeck, from considering only the analogy of their style and taste, with others of a similar construction; their age would be fixed at a much later period than appears to be consistent with truth. The age of Aurelian, which is the period of the building of the temples at Palmyra, would appear, from their resemblance to each other, to be also that of the buildings at Baalbeck; yet there are many and powerful reasons for supposing them to have been constructed during the reign of Antoninus Pius. In the styles of architecture, adopted both at Baalbeck and at Palmyra, may be traced that epoch of the arts wherein a bad taste was sought to be concealed by cost, luxury, and extravagance. In the buildings at Baalbeck is perceived a tasteless compound of Asiatic luxuriance and Grecian simplicity, forming a fantastical style of ornament that quite disfigures the grandeur of their architecture. Although erected in an age distinguished for its extravagance and bad taste, yet there is exhibited in these works a grandeur of design, a boldness of conception and execution, and a knowledge of construction which must be admired in spite of the bad taste of their decorations; and proves their architects to have been men of science and well acquainted with the practical part of their art.

Travellers cannot behold without astonishment the magnitude of the materials used in the construction of these edifices. Many of the blocks of marble with which the walls are built, are sixteen feet in length, and the columns of granite and marble are almost innumerable. Their number and dimensions, and perhaps their situation, in the middle of immense deserts, are perhaps the only accountable reasons

why they have been so long preserved from the barbarism of the Arabs or the cupidity of the Turks. The circuit of the walls of Baalbeck, as they appear at present, is about a league, and their construction appears to have been the ill assorted workmanship of different ages. They are confused masses of masonry, composed of a mixture of broken capitals, friezes, other parts of entablatures, sculptures, Greek and Latin inscriptions, &c. On the upper part of one of the walls is elevated a Doric column, the only one of the order to be found at Baalbeck.

The ruins of the temple of Baal, or of the Sun, is the skeleton of one of those magnificent enterprises in art, which may enter competition with the ruins of ancient Egypt. Its length is about nine hundred feet, and its width four hundred and fifty. The entrance to the pronaos, or portico, is by a row of twelve columns, flanked by two wings ornamented with pilasters. It was approached by a magnificent flight of steps, of which there are but few remains. The interior of the portico is choked up with heaps of ruins, which, when surmounted, leads to an hexagonal court of one hundred and eighty feet diameter, strewed with broken shafts of columns, mutilated capitals, wrecks of pilasters, bases, and other architectural and sculptural fragments. The buildings in this and the adjoining court, appear to have been appropriated for academies, and lodgings for the priests of the temple. Through an opening at the end of this court is perceived a vast perspective of ruins, which are best viewed from the top of a slope that was formerly a staircase, which communicated with a rectangular court three hundred and fifty feet long and three hundred and forty-six wide. At the end of the court are six enormous columns, and to the left is another row of columns which formed the peristyle to the body of the temple. The buildings to the right and left of this court form a sort of gallery, which is divided into seven parts, to each of the great wings or lateral buildings. At the extremity of this court is the cell or body of the temple itself, where are the beforementioned six colossal columns. Their shafts measure twenty-two feet in circumference, and fifty-eight in height; and the whole height of the order (the Corinthian) nearly seventy-two feet. On examining the circumjacent site, a row of bases were discovered arranged in a parallelogrammatic form of two hundred and seventy feet in length, and one hundred and fifty in width. This belt of columns encompassed the cell or body of the temple, which was decastyle (ten columned) in front, with nineteen columns in flank, and of the fourth or peripteral order of temples; but its intercolumniations do not accord with any of the five species described in the system of Vitruvius. These buildings are all of the Corinthian order, with the exception of some pilastral elevations, which are of the Composite.

The second temple is situate near the southernmost part of the city upon an irregular site. It is pseudodipteral (see that word) and does not appear to have been surrounded by a peristyle and court like the former. It is, however, more entire, has eight columns in front and thirteen in flank, of the Corinthian order. Their shafts are nearly sixteen feet in circumference and forty-four in height. There are few architectural remains of the ancient world more rich in decoration than those of Baalbeck. The soffites and ceilings of the peristyle are panelled in lozenge forms with representations of Jupiter and his eagle, Leda and the swan, Diana with her bow and crescent, and various busts in the costume of emperors and empresses. All the members of the interior entablatures are overloaded with a profusion of ornaments. The archivolts, the heads of the niches, the frieze of the principal order are loaded with the most sumptuous embellishments of sculpture. The interior columns are all fluted, and those of the exterior plain. Dr. Pococke conceives that nothing can be finer than the entrance to the great temple. Almost all the members are enriched with sculptural representations of flowers and fruit, and the frieze with ears of corn of admirable execution. According to Volney, the walls of the smaller temple suffered much from the earthquake of 1759; which is confirmed by our countrymen, who, in 1784, found but six columns of the great temple standing out of the nine, which were erect in 1751; and twenty only out of twenty-nine belonging to the smaller temple. The rapacity of the Turks has also contributed to their destruction, from their desire of possessing the iron pins and cramps with which the huge blocks of masonry are joined.

Baalbeck also possesses the remains of a singular and curious monument of the art. It is in the southern part of the city, and its lower story is used for a Greek church. This curious relic is a circular temple, differing in every respect from the precepts of Vitruvius. Its plan is extremely whimsical, and all its details pre-

sent a mass of liberties and abuses. See Dr. Pococke's Travels in the East; R. Wood's Ruins of Baalbeck, 1 vol. fol. Lond. 1757; R. Wood's Ruins of Palmyra and Baalbeck, 2 vols. fol. Lond. 1757.

Babylon. *In the history of the arts.* From Babel. One of the most ancient cities recorded in history, and for a long time the capital of Chaldea. It was on or near the site of Babylon that the descendants of Noah began to build a city and a tower, the size and height of which were to surpass any thing human, and to enable them to reach the skies. Josephus ascribes the building of this celebrated tower to Nimrod, who according to Bochart (*Phaleg.* i. 10.) was, even if then born, too young to have had any part in its construction. The punishment of these ambitious mortals is well known to every reader of the Old Testament. Plato (*Polit.* p. 272. ed. Steph.) mentions a similar tradition, as does Abydenus, as quoted by Eusebius (*Præpar. Evangel.* ix. 14). These traditions show that traces of the Mosaic account were scattered far and wide among the people of Asia. See Architecture, Arts, &c.

Babylonica. [*vestes* vel *textum.*] *In archaiology.* A sort of rich weaving or hangings, so called from the city of Babylon, when the art of weaving hangings with a variety of colours was first invented.

Bacchæ or Bacchantes. [Βάκχαι, Gr.] *In archaiology.* Priestesses of Bacchus. They are sometimes called *Mænades*, on account of the frantic ceremonies used in their festivals, and also *Thyades*, after a mad priest of Bacchus named Thyadis, from the same cause. They ornamented their heads with horns, and carried a thyrsus in their hands, using the most frantic gestures in these orgies, which were mostly in the night (see Ovid. A. M. i. 353). The chorus of the play of Euripides, entitled Bacchæ, is composed of these priestesses, whence it derives its name.

Bacchanalia. *In archaiology.* Festivals instituted in honour of Bacchus at Rome, similar to the Dionysia of the Greeks. They were divided into two principal celebrations, the greater and the less. The former were held in the city in the spring with much pomp, and called by the Greeks, Dionysia; and the latter in the autumn, and celebrated in the fields and vineyards. Of the enormities practised under the veil of these festivals, Livy has left us a particular account (xxxix. 8, &c.) The Bacchanalia were first introduced from Greece into Etruria, and soon found their way into Rome.

Bacchus. [Βάκχος, Gr.] *In the mythology of the arts.* The son of Jupiter by Semele, the daughter of Cadmus, King of Thebes in Bœotia. For his history see Ovid, the Hymns of Orpheus, and the other writers of the mythology of the ancients. In works of art, as well as in the poets, this god is generally represented crowned with vine leaves and ivy, as the god of wine; the thyrsus in his hand is a distinguishing symbol (see Attributes, Thyrsus). His car is drawn by lions and tigers; and Bacchantes, Satyrs, &c. make up the procession (Hor. i. Od. xii. v. 21. Æn. vi. v. 805. Met. iv. v. 21. Fast. iii. v. 729). Bacchus is described by the ancient writers as a great and bloodless conqueror: he traversed a great part of the world, and made considerable conquests in India, before the Theban war. Not far from the Ganges he erected two columns as the oriental *ne plus ultra.* During these travels he benefited every nation that he visited by imparting some improvement in civilization (see Stat. Theb. vii. v. 567). The character of this god has been much misrepresented by modern artists, in making him very fat; whereas, the best ancient artists and poets always represented him as of that *media ætas* which Ovid (fasti iii.) elsewhere calls *utilis*, and of almost feminine beauty. The Roman poets have given him eternal youth (see Tibullus, i. 4. who decks Bacchus and Apollo with *eterna juventa*), and reckon him next to Apollo for beauty, and the length and flow of his hair. The jollity and carelessness of this god is another misrepresentation into which many modern poets have fallen; whereas, ancient authors expressly say, that for valour and achievements he got a place in the highest heaven; hence too he was styled *liber pater*, or Bacchus the great prince; and Quintus Curtius says, the greatest compliment the flatterers of Alexander the Great could pay that prince, was to say, he exceeded Bacchus and Hercules (Curt. l. viii. c. 18). The heads of Apollo and Bacchus, as was observed under the article Apollo (see Apollo), were so similar, they could hardly be known from one another without some other attribute. On a gem at Florence is represented several heads upon a tree, which is explained by a passage from Virgil (Geo. ii. v. 392), who speaks of little heads of Bacchus being hung up by countrymen on trees, from a notion that his regard gave fertility to the grounds. The poets generally attributed horns to Bacchus, to show, as Clemens Alexandrinus observes, that he was the son of Jupiter Ammon, but they are

seldom met with in his statues. This the learned author of *Polymetis* thinks may be owing to the ignorance of the early antiquaries, who, when they found such a head, attributed it to a fawn, and then added some attribute of these silvan deities to the figure. The horns are so positively an attribute of Bacchus, that no artist who would correctly respresent this deity should omit them. For Ovid in his Fasti (III. v. 790), Horace in his Epistles (Ep. xv. v. 24), Ovid again, in his Art of Love (I. v. 232. *Ib.* III. v. 348). The Thebais of Statius (IX. v. 136. *Ib.* VII. v. 131), and other authors continually mention them, and Ovid relates (FAST. III. v. 500) that Ariadne fell in love with him on this account. The most usual attributes with which an artist should decorate and distinguish this god, are his thyrsus, his vine, and ivy crowns, his Syrma or long triumphal robe, his Hebris or fawn skin, his Cothurni or buskins; his head is sometimes decorated with a golden mitra, and sometimes with wreaths of flowers (*Vide* HER. FUR. Act. II. Sc. 3. v. 475. OED. Act. II. Chor. v. 415. VIRGIL GEO. II. v. 8, &c. &c.) The cantharus, calathus, or scyphus, in the hand of Bacchus, and the tiger at the feet of his statues, seem equally to relate to his character as the god of wine or jollity, because he is said to have first introduced the vine into Europe; which he brought with him after his conquest of India, where it naturally grew, especially about Nysa, a city built by him, and afterwards spared by Alexander the Great for their devotion to his favourite god (QUINT. CURT. xii. 7. Arrian, v). But although the ancients gave him the character of the god of drinking, he is never represented as drunk by the ancient artists, and seldom by the poets. Ovid represents him as rather pretending to be drunk than really so (MET. III. v. 609). The modern ideas of Bacchus seem to be a mixture of the two characters of Bacchus and Silenus. The youth of the one is joined to the sottishness of the other, and the misrepresented god is placed astride upon a tun. So that from the finest shape and face he is degraded, by modern painters and sculptors, to a fat jolly boy half drunk. Horace calls him the modest joyous god (HOR. I. OD. 27. v. 4. ID. IV. OD. 15). The ancient poets, who should always be our guides in matters of this kind, consider Bacchus as their joint inspirer with Apollo. Their Parnassus rose with two summits, one was called Nysa, sacred to Bacchus; and the other Cyrrha, sacred to Apollo; and the Roman poets seem to have worn the ivy crown of Bacchus, even more than the laurel crown of Apollo (*Vide* VIRG. ECL. VIII. v. 13. HOR. I. EP. III. v. 25, &c. &c.) which may serve to explain some bassi rilievi, where Bacchus is attended by the nine muses, which are properly enough allotted to him under this character.

The finest antique representations of this god are some bassi rilievi of the bearded or Indian Bacchus in the British Museum; some statues, &c. which were formerly in the Napoleon Museum at Paris, but restored to their rightful owners at the peace of 1814. One of these is above six feet high, and of Greek marble. This beautiful and elegant statue is entirely naked. The head accords with the foregoing quotations, the hair is long and flowing, bound round with a band and crowned with wreaths of vine and ivy, as described by Horace (III. OD. 25. v. ULT. ID. IV. OD. 8. v. ULT.), and in the Thebais of Statius, (Lib. v. v. 259). This beautiful relic of ancient art was brought from the *Château de Richelieu*, and is entirely antique, except the two arms, which are of modern workmanship. Another representation of this god, formerly in that splendid collection of works of ancient art, is a fine statue, nearly seven feet high, of the bearded or Indian Bacchus, which for a long time was thought to be of Sardanapalus, the King of Assyria. This statue is dressed in a long tunic with large folds, wrapped in a vast mantle, which only leaves his right hand at liberty. His long hair is dressed in a formal manner, and joins his ample beard, which flows down his breast. This statue is of Pentelican marble, and was discovered about forty years ago, six leagues from Rome, in the village of Monte Porzio, the spot where it is supposed a palace of Lucius Varius formerly stood. In the same collection was also a bust of this same Bacchus, of Pentelican marble, with formal braided hair and beard. Another exquisite statue of the youthful Bacchus was also in this museum. It is about the same height as the last, about six feet eight or nine inches, and is of Pentelican marble; it stood in the hall of Apollo, and was called in the French catalogue, "Bacchus en Repos." It possesses all the beforementioned characteristics of the god, he is reclining his left arm on the trunk of a tree, round which winds the stem of a vine, loaded with grapes of the largest size, and his right arm is placed on his head. Engravings of these last named statues, with learned dissertations upon them, are to be

found in *Annales du Musée, par* C. P. Landon, 16 vols. 8vo. Paris, 1815, and other works descriptive of ancient statues.

Bacchus was worshiped by different nations under as great a variety of names, as are the acts, which are attributed to him. In Sicily he was called Morichus; in Arabia, Oracal and Adoneus; in Sparta, Scythites and Milichius. Ausonius (ep. xxix.) has commemorated the principal titles of this god in the following lines:—

> Ogygia me Bacchum vocat,
> Osirim Ægyptus putat,
> Mystæ Phanaeem nominant,
> Dionyson Indi existimant,
> Romana sacra Liberum,
> Arabica gens Adoneum,
> Lucanianus Pantheum.

For further accounts of this extensively adored deity, the reader is referred to the first fable in the Metamorphoses of Ovid. Banier in the second volume of his Mythology; Nonnius, the poet of Panopolis in Egypt, in his Dionysiaca; the third book of Diodorus Siculus, and the various authors and passages cited in the course of this article.

Baetylia. [from Βαιτυλος, Gr. The stone which Saturn is said to have devoured instead of his son Jupiter.) *In archaiology.* Anointed stones, worshiped by the earlier Phœnicians and other nations, before they emerged from a state of barbarism.

Balbec. *Vide* Baalbeck.

Balcony. [*balcone,* Ital.] *In architecture.* A projection from the front of a house, surrounded by a balustrade or open gallery. In common houses these are simple projections, supported by trusses of wood, stone, or iron, and surrounded by a plain or ornamental railing; but they are susceptible of considerable elegance of decoration, and may be supported by columns, caryatides, carved trusses or cantalivers, and covered by elegant canopies, supported in a similar manner.

Baldachin. [*baldachino,* Ital.] *In architecture and sculpture.* A kind of canopy ornamented with sculpture, and supported by columns for the embellishment of altars; but more particularly used to those which are insulated like the great altar in the church of St. Peter at Rome.

Ballium. *In ancient architecture.* The court within a fortified castle. There were generally two, the outer *ballium* immediately within the gates, separated by a wall from the inner *ballium,* which contained the apartments for the garrison and governor. St. Peter in the *Bailey,* at Oxford, stands in the outer ballium of the castle. The Old *Bailey* in London is so named for occupying a similar situation.

Balteus. *In ancient architecture.* See Præcinctio.

Balustre. [*balaustrio,* Ital.] *In architecture.* A small turned column usually introduced between piers, on the upper parts of large buildings under windows, and on balconies, &c.

Balustrade. [Fr.] *In architecture.* A row of balusters.

Bamboo. See Architecture, Indian.

Band. [*bende,* Dutch, *bande,* Fr.] *In architecture.* Any flat low moulding face or plinth. Bands are constituent members of architraves, imposts, archivolts, &c. and are often called faciæ, from the Latin facia (see Vitruvius, iii. 3). They differ in size and number according to the order they are employed in. See Plat Band.

Bank. *In architecture.* See Mole.

Baptistery. [βαπτιστήριον, Gr. *baptisterium,* Lat.] *In architecture.* The place where baptism is administered, and sometimes the vessel in which the water for this ceremony is held (see Font). Baptisteries are susceptible of much decoration, and are in general of a circular or octagonal form, detached from the body of the church. The most celebrated baptisteries are, that in the Basilica of San Giovanni Lateranense at Rome, which is reckoned the most ancient in Europe, and is called the baptistery of Constantine; that of the church of St. Sophia at Constantinople, which is so spacious that it has served as a hall of assemblage to a very numerous council; that of Florence, which is said to have been formerly a temple of Mars; it is an octagon of nearly ninety English feet in diameter, and is covered with a cupola of the same figure, which is decorated with musaicks, by Andrea Tasi, a disciple of Cimabue. Formerly the centre was ornamented with a magnificent octagonal baptismal font, the base of which is still seen in the pavement. The exterior is covered with marble, and has three principal entrances, which are embellished with statues and other works of the most eminent modern sculptors. Lorenzo Ghiberti made for the principal those celebrated gates which Michael Angiolo said were worthy of being the portals of Paradise. The others were executed under the direction of Andrea da Pisa. Pisa has also a celebrated baptistery, which was begun in 1152, and finished in eight years by Dioti Salvi, an architect of that city. In the middle of this building is an octagonal basin or font beautifully sculptured, and

large enough for the entire immersion of infants in baptism. Both the interior and exterior of this fine baptistery have deservedly excited the admiration of travellers, and is particularly alluded to by Addison in his travels. Other baptisteries, being only appendages to churches, are not so much worthy of notice as the above, which are in themselves splendid insulated buildings. It does not appear that any building devoted expressly to the purpose of baptism was ever erected in Great Britain; but the nearest approach to those of Italy is that of Ely. We have, however, many extraordinary fonts, which are described under that head. See FONT.

BARROWS. [from the Saxon.] *In archaiology.* A hill or mound of earth, which was anciently raised over the bodies of the deceased heroes and persons of distinguished characters, and are considered by some antiquaries as the most ancient sepulchral monuments in the world. See KING's *Munimenta Antiqua*, 4 vols. fol. Lond. 1799; GOUGH's *Sepulchral Monuments of Great Britain;* DOUGLAS's *Nenia Britannica;* STACKHOUSE's *Illustrations of Tumuli and ancient Barrows;* SALMON's *Roman Antiquities in Great Britain;* and OXLEY's *Journals of Two Expeditions into the interior of New South Wales.*

BASE. [βασις, Gr. *basis*, Lat.] *In architecture and sculpture.* The foot or bottom of any figure. The word base is used, generally, for any body which bears another, but particularly for that portion of the lower part of a column, which is between the shaft and pedestal (when a pedestal is used), (see PLINTH, PEDESTAL) and differs in the various orders and species of architecture. In Egyptian architecture the bases of columns are mostly simple plinths; and although Dr. Pococke exhibits the base of a column found in Egypt with several tori, yet this circumstance indicates the style to be of the time of Greek architecture prevailing in Egypt. The base of the Tuscan column consists of a torus and fillet; the Doric has none, except a plain plinth, on which it is sometimes elevated, but it is more generally placed on a continued plinth or upper step of the temple, as in the temples at Thoricus, Corinth, Agrigentum, Pœstum, Athens, Sunium, and Ægina. Although, in modern times, the attic base has been given to the Roman spoliation of the Doric, yet in the best time of the Roman architecture (according to Vitruvius) the Doric was used, as by its inventors, without the base. The Ionic column, in the earliest specimens, has a base, of which the height was half its diameter, and composed of a variety of members. The bases to the columns in the interior of the Propylea at Athens, have the base, which is now called the attic from its having its origin in Attica. Those of the little temple near the Ilyssus, at Athens, also bear some resemblance to the attic as well as the beautiful example of Hermogenes, in the temple of Bacchus at Teos, and those in the temple of Minerva Polias at Priene. The Greeks seldom used a plinth to this base, but placed it immediately on the upper step or plinth of the temple; but the Romans always used a plinth, as in the temple of Fortuna Virilis, and the theatre of Marcellus at Rome; and Vitruvius also allows it a plinth. The attic base is composed of a large torus, immediately on the plinth, on which, receding beyond the axis of the projecting curve, is a small fillet, and on that a Scotia (see SCOTIA), crowned with another fillet, also receding from the perpendicular of the lower fillet; from the perpendicular of this, another torus projects somewhat smaller than the lower one, on which is superadded a larger fillet than either of the others, from which the apophyge, with a gentle sweep, joins the fust or shaft of the column. This base may be considered as more perfect than any of the others, and is composed with so much taste; its members are disposed with such skill and harmony of proportion; and its profile or contour so pleasing, that it is no wonder at its frequent occasional adaptation (although improperly in some instances) to all the orders. The bases to the Corinthian and Composite orders emanate from the attic; a torus or two more, a greater number of fillets or beads, two scotiæ, &c. are the general characteristics of these bases. Different bases have been invented, and used both by Greek as well as Roman architects for the Ionic order, but all fall short of the purity of style which characterizes the attic. Examples of the Greek variation, which thus yield to the attic, are to be found in the temple of Apollo Dydemeus near Miletus, and that of Minerva Polias at Priene, which, according to the published engravings, has a profile so far from pleasing as scarcely to deserve imitation. The Greeks and Romans have also both used the attic base to the Corinthian order, as in the Choragic monument of Lysicrates at Athens; and in the arch of Constantine at Rome. Specimens of good examples of Corinthian bases may be found in the columns of the portico and interior of the Pantheon, and those of the temple of Jupiter Stator at Rome. The tower of

Andronicus Cyrrhestes at Athens, has Corinthian columns without bases; the arch of Septimius Severus has columns of the Composite order, with attic bases; and the arch of Titus, columns of the same order with Corinthian bases. See STUART'S ATHENS, the IONIAN ANTIQUITIES; VASI, DESGODETZ, and others, on the Antiquities of Rome; VITRUVIUS, PALLADIO, SIR WILLIAM CHAMBERS, and others on civil Architecture.

In sculpture, the word *base* implies that part of a piece of sculpture on which a statue stands. These are sometimes plain blocks, and at others architecturally decorated, in which they are susceptible of much beauty and ornament, and call for taste and judgment in the artist to design it characteristically. They are often decorated with bassi rilievi, which should always be relative to the insistent work. See PEDESTAL.

In geometry, the *base* is the lowest side of a figure, as the base of a triangle is whichever of its sides is lowest or parallel to the horizon, &c.

BASE LINE. *In perspective.* The common section of a picture and the geometrical plane. See PERSPECTIVE.

BASEMENT. [from BASE, *low.*] *In architecture.* The lower part or story of a building when it is in the form of a pedestal or stylobate with a base or plinth, die, and cornice. Also in modern or practical English architecture, those stories of houses which are below the base or level of the street, and are generally lighted by areas, &c.

BASILICA. [βασιλικός, Gr. *basilicus*, Lat.] *In architecture.* A royal, princely, magnificent building. A large hall, magnificent church, or public place with aisles, porticoes, galleries, tribunals, &c. and so called because princes sat and administered justice in person, or that magistrates, with the power of kings, heard causes in them (see Cic. ad Att. xi. 29. In Verrem vi. Pro Murenâ). The *basilica* among the ancient Romans was distinguished from the *forum* by the latter being without a roof. The form of an ancient basilica was that of a parallelogram, with a portico at each end, and covered with a roof supported by rows of columns. They were the places where the practitioners of the law assembled and gave replies to the consultations of their clients, and contained, also, halls for the exercise of young orators in declamation. The lower portico was occupied by tradesmen, and the centre parts for the assembling and perambulation of the people; so that these buildings were at the same time exchanges and courts of judicature.

Many of the continental churches resemble the ancient basilicas more than any other kind of edifice, and the name from the similarity of form has also been applied to them. They consist generally of a large hall or space three times its width in length, divided by several ranges of columns, the centre one being always the widest. In some instances they were enclosed by walls, and in others they were open on every side for the free access of the public, and that the galleries might better communicate with the street. But when the sides were enclosed, the principal front was provided with an open colonnade, free to every one. When the entrance to the basilica was at one extremity, the other was terminated by a semicircular recess, where the tribunal or throne was mostly situated, but sometimes it was placed on the exterior of the building. In these edifices a second order of columns was placed upon the lower; which supported the ceiling, and formed a gallery on every side, except over the circular part. The second order was separated from the first by a considerable space, which served for a support to those above, as well as for the stylobate or continued pedestal to the order. The form and disposition of basilicas were well calculated for large halls, and their construction united the merits of solidity and economy. Their solidity is proved by their duration, for some of them have lasted for above four centuries, and their economy resulted from the lightness of the parts of support, and the roof, which was of timber. The lower colonnade had a ceiling, which served as a floor to the upper gallery; which also having a ceiling, supported that of the great nave and principal truss of the roof. Light was obtained by openings in the wall, where the basilica was enclosed, and from the intercolumniations where open. The upper galleries had also windows, which lighted the interior of the building. It appears that the only part of the basilica which could have the form of an arch, was the semicircular recess, or the place where the tribunal was erected; and was only a portion of an hemispherical dome, or a sort of large niche head. The multiplicity of columns in these buildings was one of their principal beauties, and rendered their appearance magnificent. The Romans often used the Corinthian order, in their basilica, as the one which was discovered upon the Palatine Hill, by Bianchini; and that of

Fano, were both of that order. The ceilings of the upper and lower galleries, and the grand nave were embellished with cornices, panellings, sculptures, and other decorations of art; but the circular recess appears to have been the part most ornamented, being often decorated with statues and other works of sculpture. The basilica discovered at Otricoli has thrown much light upon the form and nature of those of antiquity, the others being almost all destroyed. The construction of a basilica was an affair of such consequence, as often to have been commemorated on medals. The basilica Æmiliana is represented upon a copper coin of the family of Æmilia; and that which Trajan built, called the Basilica Ulpia, is found upon a medal of gold and another of bronze, of the time of that emperor.

Palladio calls that description of civil buildings basilicas, which are met with in several cities of Italy, and are appropriated to the same use as the ancient basilicas. The basilica of modern times differs from those of the ancient, inasmuch as the latter were level with the ground, whilst the former are elevated upon arches, the lower parts of which are occupied by shops, prisons, and other public places. Another difference is, that the ancient basilicas had porticos only in the interior, whilst the moderns have them only on the exterior. One of this kind is at Padua; another at Brescia, which is remarkable for its grandeur and richness of ornaments. But the most celebrated is the basilica of Vicenza, called *Il Palazzo della Ragione;* the exterior and façade of which is from a design of Palladio, and has given rise to the opinion of its being entirely his work, though the principal body of the building is much more ancient. It is well represented in the works of Palladio, by O. B. Scamozzi, mentioned at the close of the article Architecture.

The term basilica is also applied to those churches which seem to have arisen from Constantine having assigned, for their worship, several of the ancient basilicas, which were more agreeable to the ancient Christians than the temples, which were subjects of their aversion; as, indeed, was every thing that related to the mythology or customs of the Pagans. The finest that now remain in Rome still bear the name of this prince; who, with the zeal of a new convert, gave his own palace upon Mount Cœlius to be converted to a Christian church; which is allowed to be the most ancient Christian basilica in the world. It is at present, however, so enveloped by modern buildings that only the plan and interior arrangement can be recognised. Shortly afterwards he built the basilica of St. Peter upon the Vatican hill, demolishing the circus of Nero and two temples to make room for the new edifice. This was replaced by the present church, which bears the name without having the true form of a basilica. The third basilica of Constantine, namely, that of St. Paul, on the Æstian Way, now called *Santo Paolo fuor delli Muri*, still exists nearly as at first constructed by Constantine and Theodosius, who completed it about fifty years afterwards, and may be regarded as affording a complete specimen of the ancient church, which differed but little from the basilica of Paganism, being a quadrilateral hall, with a flat ceiling, divided by columns into three or five aisles. This church was partly destroyed by an earthquake, and restored by Pope Leo III. in 816. The roof and part of the decorations are the works of Bernardo Rosselini, the high altar and choir of Onorio Lunghi, and the portico of Alessandro Specchi, a pupil of Carlo Fontana; its ancient form and construction alone being of the time of Constantine. The basilica of St. Maria-majore, with its modern embellishments, distributed with good choice, presents a rich and fine example, is reckoned by many the most perfect model of a Christian church, and the most correct copy of an ancient basilica. The church of St. Agnese, without the walls, the united labours of Borromino and Carlo Rainaldi, is yet more like the ancient basilica in form, although it does not bear the name. This church was also originally constructed by Constantine, at the entreaty of Constance, his sister or daughter, and restored by the above named architects.

Since the time of Constantine all the Christian edifices of the West assumed, in various degrees, the form of the Pagan basilica, and it is to be found even in Gothic buildings. The principal architects of Italy, in their largest works, seem to have endeavoured to unite the dimensions of the basilicas of the West, with the manner of construction practised in the East, which has so altered the form that scarcely any resemblance to the ancient basilica can be traced in their works.

The form of the eastern basilicas took its origin from that of St. Sophia at Constantinople, built by Constantine in imitation of the ancient church of St. Peter at Rome. It was several times burnt and rebuilt, till at length, during the reigns of Justinian, Anthemius of Tralles, and Isi-

dorus of Miletus, the most celebrated architects of the time, united in the design of erecting a temple which should surpass in grandeur all that had then been built, and resolved to use no timber in its construction, that it might not be subject to fire. The plan of this church, as rebuilt by Justinian in the form of a cross, was thought so excellent that it has been almost generally imitated by every succeeding ecclesiastical architect. It formed a square, in the centre of which rose a dome or hemispherical cupola, perforated by twenty-four windows, and surmounted by a lantern. On each side was a smaller collateral cupola, which added to the effect of the principal; and at the extremity of the church was a large niche or demi-cupola, under which was placed the grand altar. The points of the cupola, where the building commences to change its plan from a square to a circle, is supported by pendentives; which manner was then a novelty in construction. Constantinople at that period was the principal seat of learning and the arts, and set the example therein to all Europe. For which reason the Venetians who, in their church of St. Mark, copied with fidelity and judgment the best parts of the plan and construction of St. Sophia, were led to imitate the bad style of the interior decorations. The form and construction of the basilicas of the East can be traced in the different churches built since that of St. Mark at Venice, till that of St. Peter at Rome, approaching or receding, in various grades, from those of the West. In later times, however, the ancient form has been revived. The monotony of pilasters, the heaviness of the piers which support the arcades, the cumbrous appearance of the arches, especially in small interiors, the difficulty of uniting the four names without the cupola, and other inconveniences, led them to adopt a new style for the disposition and construction of churches.

The best treatises on the forms of basilicas, both ancient and modern, are *Basilica di S. Marco di Venezia*, fol.; COSTAGUTI, *Architettura di S. Pietro*, fol. ROM. 1684; CARLO FONTANA, *Descrizione del Vaticano*, fol. ROM. 1644; *an Essay on the Churches of the early Christians*, by LE ROY, &c. &c. (See also ARCHITECTURE, CATHEDRAL, CUPOLA, DOME.)

BASIS. [Βάσις, Gr. *basis*, Lat.] *In ancient architecture.* The foot, base, or foundation of a building, &c. See FOUNDATION, BASE.

BASKET. See CAPITAL CORINTHIAN.

BAS RELIEF. See BASSO RILIEVO.

BASSO RILIEVO. [Italian.] *In sculpture.* That kind of sculpture in which the figures do not stand out from the ground in their full proportion: low or flat sculpture. The term belongs exclusively to modern art. Pliny (xxxiii. 11.) applies the word ἀνάγλυπτα to workmanship of this kind; but it is a term by no means so distinctive as the Italian basso-rilievo. See ANAGLYPHIC. All works in sculpture are classed as bassi rilievi when the subjects represented are not isolated, but are adherent to the ground, whether they are of a similar or different material, and applied or fixed thereto; or form a part of the material in which they are wrought. There are three sorts of relief in sculpture, *alto rilievo, mezzo rilievo, and basso rilievo*, which will be found more fully investigated under the article SCULPTURE.

Alto rilievo is that relief in which the figures are entire, or nearly so, being attached only in a few places, and are relieved from the ground like the metopes of the Parthenon; *mezzo rilievo* is that in which half the figure stands clear from the ground, and the other appears buried therein; and *basso rilievo*, properly so called, is that in which the figures lose their projecture, and represented as nearly flat, like the Panathenæic procession of the same temple. Custom, however, has nearly abolished two of these terms; and *basso rilievo* is often applied to each sort, be the projections what they may. The word *anaglyphum*, in the ancient writers, indicates a particular manner of this sort of sculpture, and is equivalent to the modern chasing or embossing; which, when executed in metal, according to Cicero, they gave the name of *toreuma*: but the specific name, and which Pausanias always uses, is Τύπος, indicating a type, copy, or figure of any thing.

The true *basso rilievo*, which has but small projection, requires more skill in the sculptor than that in which the projection is more considerable; because it is extremely difficult to give a natural effect to a figure which is of its proper height and size, but falls short of its real thickness. What is more difficult even than this, in the style of sculpture now under consideration, is picturesque composition in grouping the figures, because the artist cannot, as in painting, employ different backgrounds remote from each other; and as the shadows in sculpture are real and not imitative, he must calculate his composition and arrange its form for the light in which it is to be placed.

The ancients used bassi rilievi in deco-

rating architectural designs, and in ornamenting their domestic furniture. All nations, however, in the history of the arts have used them, and they resemble in style that of their other works. The Egyptians ornamented their temples with an innumerable quantity of figures and hieroglyphics, of which the greater part have the outlines only sunk, and the area thus formed only painted; but many of them are of the class bassi rilievi. (See DENON's *Travels in Egypt, Captain* NORDEN, *and Dr.* POCOCKE; also the Egyptian sculptures in the British Museum, those brought to Europe by Belzoni, &c.) Their manner of executing these sculptures is singular: they first channeled an outline in the stone, and sunk it round the figure, so that it did not project beyond the original face; being in fact more a species of engraving than sculpture. The cabinet of the Royal Library at Paris possesses a very curious Egyptian sculpture thus wrought, and many of the same description are found in Egypt, principally on the frontispieces of the temples where the Scarabeus extends his reign.

The Persians were also partial to the use of bassi rilievi. The walls of *Tschelminar*, the ancient Persepolis, have preserved a great number, and among others worthy of note, that singular procession which is engraved in the works of Chardin, Le Brun, Niehbuhr. (See PERSEPOLIS.) They are executed in very high relief, so that in the same figure the head and other principal parts were detached from the ground, which has made them peculiarly liable to mutilation.

The Etruscans also used bassi rilievi; but Winckelman errs in attributing to this ancient people all those works in which the figures are clothed in draperies, with straight square folds, designed in a stiff formal style like the antique altar of the Cardinal Albani, on which is represented their twelve principal gods. On the contrary, every well informed archaiologist allows these and other similar monuments of art to belong to the very earliest period of the Greeks. Some bassi rilievi of clay, painted in water colours, found near the country of the Volscii, which are preserved in the cabinet of the Cardinal Borgia, and published under his patronage, proves, beyond a doubt, that the Etruscans, like the Greeks, often painted their sculptural figures. Millin observes, that this is a practice exclusively belonging to the infancy and decline of art; a remark which the recent discoveries of Mr. C. R. Cockerell, and other modern travellers, as well as the known practice of Phidias, who belonged to its brightest days, fully refute.

The bassi rilievi used by the ancients for decorating their architecture, and with which they sometimes ornamented the fronts of their temples, were often formed of baked clay. (See TERRA COTTA, PEDIMENT, TYMPANUM.) They also executed works of this description in ivory and various metals, but oftener in marble.

Among the most celebrated bassi rilievi of antiquity are those which Phidias carved in ivory, upon the shield and the base of the statue of Minerva at Athens. (See IVORY.) Those which ornamented the throne of Jupiter Olympus, executed by Alcamenes; those of Apollo at Amyclæ, in Laconia; the bassi rilievi of the temple of Hercules at Thebes, executed by Praxiteles; those of the temple of Delphos, the joint work of Praxias and Androsthenes; the celebrated funeral monument of Mausolus, called the Mausoleum, executed by Scopas, Bryaxis, Timotheus, and Leochares; the thirty-six columns of the temple of Diana at Ephesus, &c.

The ancient artists that have most distinguished themselves in the execution of that beautiful kind of basso rilievo, with which they ornamented their vases, according to Pliny, were Mentor, Acragas, Boethus, Mys, Calamis, Antipater, Stratonicus, Praxiteles, &c. See VASES.

The sculptures in the metopes and pediments of the Parthenon at Athens, which were entire in the time of Spon, who has described them, are in alto rilievo, like statues affixed to a back ground of marble. Their great size and height preserved them from those accidents to which they would have been liable in a lower situation, and to which, on the same account, they gave a less projection. Many of these invaluable relics of the brightest days of Grecian art, were brought to England by Lord Elgin, and are preserved in the British Museum. See PARTHENON, ARCHITECTURE, &c.

As the greater part of the antique bassi rilievi, now remaining, are executed in marble, they form the principal criterion by which we can judge of the excellency of their sculptors. Many of the best preserved were used to ornament their altars, as is seen in those which are in the Museum Capitolinum. One of these beautiful relics represents the education of Jupiter, and the others the labours of Hercules. They were also used as decorations to the bases of statues, and oftener to their tombs; and even sometimes to the pedestals or

marginal stones at the brinks of wells, as may be seen in one belonging to the last mentioned museum, which represents the education of Achilles; and a beautiful one of fawns and nymphs in the British Museum. (See PUTEAL.) In the decadence of the Greek empire, they used to erect bassi rilievi in memory of those men who had deserved well of their country, instead of statues, which had been the practice of their ancestors; such were these which, according to Pausanias, several cities of Arcadia erected to Polybius. In their sacred places were kept the bassi rilievi, which represented the images of the gods, or their mythological adventures. Among the number of those which are cited as particularly celebrated, were two fine ones of Pentelican marble, of colossal magnitude, executed by Alcamenes, and dedicated by the Athenians in the temple of Hercules, at Thebes, after the expulsion of their tyrants; and which, according to Pausanias, represented Hercules and Minerva. Another singular custom to which the Greeks appropriated this kind of sculpture has reached our times, through their works, although it is not mentioned by any author of antiquity; namely, that of teaching mythology and poetical history by means of palpable images. Such was the use of that celebrated relic of antiquity called the Iliac table, now in the Museum Capitolinum; such the basso rilievo of the repose or apotheosis of Hercules, in the Villa Albani; such the fragments of the mythological tables of Verona; and those in the cabinet of the Villa Borgia. These curious monuments of antiquity are conjectured to have been a portion of a mythological circle, or even of an entire cyclic history. These didactic sculptures were accompanied by epigraphs, which explained the subjects, and which were often arranged in the form of chronological tables, like the list of the priestesses of Juno Argeus; the basso rilievo of the apotheosis of Hercules, and the fragment of Verona.

From the time that the arts and artists of Greece were brought to Rome, to embellish their city, they employed bassi rilievi to commemorate their victories, and to embellish with explanatory ornaments their triumphal arches and columns, and other similar usages. Under the government of the emperors, they made another use of this species of sculpture, which is met with more frequently, and from whence we derive the greater part of those subjects which are now preserved to our times. The custom of burning their dead had fallen into disuse, partly from a scarcity of fuel, and partly because they had acquired many of the religious opinions of the eastern nations, from whom they adopted the custom of occasionally interring the bodies of their dead in coffins of marble and other valuable materials, which they generally called Sarcophagi. (See SARCOPHAGUS.) Their numbers at length became immense, both in the city and in the environs of Rome, if we may judge only from those which are to be found in the cabinets of the curious. The bassi rilievi, with which these sarcophagi are ornamented, are usually wrought with little care, and by sculptors of minor talents; but they preserve to us many of the finest compositions of their greatest artists, which were the admiration of antiquity. In many of the Greek bassi rilievi, the face of the deceased only is finished, and many antiquaries, from this circumstance, have conjectured that it was a sort of manufacture in Greece, to make sarcophagi for the Romans, and that they were to be finished after they were sold. The bad style of these sculptures is no reason for supposing that these marbles were not carved in Greece, because in the time of the emperors, the best Grecian artists were removed to Rome, and those of meaner talents remained at home. From the great quantity of marble that Greece, and indeed all Attica, possessed, it is natural to suppose that those sculptors who remained behind in their country would execute bassi rilievis for sarcophagi, when so ready a sale was found for them at Rome. Many archaiologists have supposed that the greater part of the compositions which are found on these sarcophagi, were copied from the great masters, of which the originals (as the paintings of Panænus and Polignotus in the Poekile, &c.) perished, when the cities of Greece were pillaged and ransacked.

The study of the ancient bassi rilievi is of great service in the history of the arts; as from them may be collected many important facts of the mythology, customs, costume, &c. of the ancients. The finest collections of bassi rilievi, now existing, are those of the British Museum, formerly the Townly Collection; the Elgin Marbles in the same museum; the collections of Mr. Thomas Hope, Mr. Soane the Professor of Architecture in the Royal Academy of London; several fine casts in the Royal Academy. In Paris they had some fine

antique bassi rilievi in the Royal Museum; in the Museum of the Augustins; and many private collections. The application of bassi rilievi among the moderns is the same as among the ancients; being used to decorate public buildings, palaces, churches, triumphal arches, theatres, concert rooms, and private houses; furniture, tombs, and other subjects of ornamental architecture. The most celebrated specimens of bassi rilievi (properly so called) of modern art in England, are those of the tympanum of the pediment of the East India House, by BACON; the monument of Captain Miller in a panel of St. Paul's Cathedral, by FLAXMAN. Several others on the public monuments, erected in that cathedral and in Westminster Abbey, by BACON, BANKS, BACON, jun. ROSSI, CHANTREY, KENDRICK, HOPPER, and WESTMACOTT. And on the continent, most of the sculptures are thus decorated (see SCULPTURE), and embrace the names of the most celebrated artists. The French critics particularly admire the bassi rilievi on the "Porte St. Denys," began by GIRARDON, and finished by MICHEL ANGUIERE, and those on the Fountain of the Innocents, called the Nymphs' Fountain, by the celebrated JEAN GOUJON.

In almost all treatises on sculpture, are found dissertations and delineations of bassi rilievi, more particularly in the *Admiranda Romanorum;* the different descriptions of the triumphal arches of the ancients, as the *Colonna Trajani. Antoninus and Marcus Aurelius*, the *Monumenta Inedita* of WINCKELMAN, *L'Antiquité expliquée de* MONFAUCON; the *Museum Pio Clementinum*, the *Monumenta Mathæiana*, the *Musée de Verone, de Cortone, la Villa Pinciana*, and the collection of ancient monuments of COUNT CAYLUS, of GUATTANI, and of MILLIN, the *Galleria Giustiniani*, &c.

BATH. [baϑ, Saxon.] *In architecture.* A place to bathe in. The baths of the ancients were either magnificent public buildings for general accommodation, or private conveniences attached to the houses of the rich. They generally contained porticos, walks, groves, fish ponds, tennis courts, halls, and an immense variety of apartments for undressing, sweating, &c. which were adorned with paintings, sculptures, musaick work, &c. They are also called Thermæ from the Greek word θέρμαι hot, which term is only properly applicable to hot baths.

During the time of the republic, the Romans had no buildings that could be compared to the gymnasii of the Greeks, it being not till the time of the emperors that thermes were erected; chiefly devoted, it is true, to public bathing, but to which they united halls for games and exercises in the manner of the gymnasii of the Greeks. See GYMNASSUM. The bath became a necessary of life to the later Romans, but in their earliest days they were satisfied by bathing in the rivers. The rich at length built baths in their own houses for the use of their families, and public ones for the service of the people. They were at first constructed with great simplicity, but towards the close of the republic, they gave them a more commodious and elegant disposition, dressing and conversation rooms, and other splendid apartments, and afterwards added hot and cold baths. In the time of Augustus, neither palestræ or gymnasii were known in Rome, for Vitruvius, who lived at that time, speaks expressly to the fact of their being unknown to the Romans. Nero appears to have been the first Roman that added gymnasii to the bath, but afterwards they always built them in an extensive manner, which comprehended, in addition to the bathing apartments, all the different parts of a gymnasium.

Titus imitated the example of Nero, and built baths on the side of his amphitheatre. Domitian and Trajan also built baths, and Hadrian reestablished those of Agrippa. Commodus, Septimius Severus, and Caracalla erected splendid establishments for this purpose: those of the latter, built at Rome, were distinguished for their grandeur, but were not finished till the time of Heliogabalus. Alexander Severus added porticos to those of Caracalla, and built new ones on the side of those of Nero; from this the whole of the buildings received the name of Thermæ Alexandriæ. The remembrance of them is recorded on some bronze and silver medals of Alexander Severus; on the reverses of which are represented a magnificent edifice, ornamented with statues and columns, which is thought to be, with great probability, the thermes of this emperor. Aurelian and Dioclesian were the last emperors who built baths on an extensive scale; and those of the last named emperors are said to surpass all the others. We can scarcely form a precise idea of the plan and disposition of the ancient thermes, their authors not having left us a sufficiently detailed description, and those which remain are either in such a dilapidated state, or surrounded with so many modern buildings, as to prevent our knowing with

certainty the form of the whole, or disposition of the parts. They were so numerous in Rome, that different authors have reckoned as many as eight hundred public.

Ammianus Marcellinus observes (lib. 16) that they built them in *modum provinciarum*, as large as provinces, which Valesius supposes to be a corruption of *piscinarum;* yet the many accounts of their ornaments, furniture, and luxury may make that assertion less problematical. Seneca says (Epis. 86), that they were arrived to such a pitch of nicety and delicacy, as to scorn to set their feet on any thing but precious stones. And Pliny (lib. 33. cap. 12) says, the seats were of solid silver. Statius has also pleasantly described one in his poem upon the baths of Claudius Etruscus, the steward of the Emperor Claudius.

> Nil ibi plebeium; nusquam Temesæa videbis
> Æra, sed argento felix propellitur unda,
> Argentoque cadit, labrisque nitentibus instat,
> Delicias mirata suas, et abire recusat.

The baths of Dioclesian are said to have had accommodations for eighteen hundred bathers. The names of the different bathing apartments were the cold bath *(frigidarium)*, the hot *(calidarium)*, the tepid *(tepidarium)*, the stone *(hypocaustum)*, the sweating room *(sudatorium)*, the undressing room *(apodyterium)*, the perfuming room *(unctuarium)*. Whatever pains that Palladio, Serlio, and other authors took in their designs for restorations of the baths of the Romans, they do not appear to have been very successful, for the designs of the same building, by different artists, differ considerably. According to Alberti, in the eighth book of his Architecture, the extent of an ancient Roman bathing establishment was at least a hundred thousand square feet. Now, if we consider the great extent of their ruins, the great number of their apartments, courts, and halls which were enclosed and served for recreation and exercise, Alberti does not err on the side of excess. They were generally of a square or oblong form, and surrounded with walls; this space had three enclosures, each of which surrounded the building, as it were, one placed within the other. The first, or what surrounded the exterior, contained the halls in which the philosophers gave their instructions, and those which were used by the athletæ. The second division contained open places, planted with trees, for the exercise of the youths. In the third division, situated in the middle of the building, were the baths, surrounded with porticoes and open courts. Sometimes the entire building was enclosed by a park, like that of Alexander Severus, which contributed greatly to the embellishment of the whole structure.

They were carefully observant to place their public baths in a warm situation; to protect them from the north winds, and expose them to the south or south-west as much as possible, that they might receive heat from the sun during the hours in which the bath was generally used. In the baths of individuals, especially in towns or cities, they sometimes made a distinction between summer and winter baths. In the first, they placed the cold bath towards the north, and in the winter baths, towards the south.

The finest and most complete of the ancient baths were composed of six principal parts: the *apodyterium* of the Greeks, and *spoliatorium* of the Romans (see those words), where they undressed, and where the guards, called *capsarii*, who took care of the clothes, were stationed. Vitruvius does not mention the apodyterium, by which appears that all baths did not have them; the *frigidarium* or *tepidarium*, appearing to have supplied its place. The second part, containing the cold baths, was named λουτρόν by the Greeks, and *frigidarium* by the Romans. The third was the *tepidarium;* the principal use of which was to prevent, by its temperate air, the dangerous effects of suddenly passing from a very hot to a very cold temperament. The tepidarium united the hot and cold baths, for which reason Pliny calls it the middle chamber *(cella media)*. The fourth apartment was that of the dry hot bath, called *sudatio* or *laconicum*, from the name of the stove that heated it, and from the custom having originated in Laconia. The *laconicum* was a round apartment, surmounted by a cupola; and generally as wide as the height from the springing of the arch. In the centre of the cupola they left an opening, closed by a bronze cover suspended to a chain that it might be opened at pleasure. By this means, they could exactly vary the temperature of the air. Under the laconicum they had a particular stove, as is seen by a picture found in the baths of Titus, which not only served to heat the pavement, but conveyed the heat through pipes into the laconicum to promote perspiration. The fifth was the *balneum* or hot water bath, called θερμολουσια (from θερμός, hot and λουσῶ, I wash or bathe) or *caldarium*, and was the most frequented. Round it was a gallery, called *schola*, which was terminated on

the side of the basin by a dwarf wall. This gallery was sufficently large to hold those who waited their turn, or who came to entertain the bathers or to keep them company. The middle was occupied by a basin, called *piscina;* or they had in the pavement baths called *labra*, *solea*, or *alvei*. According to Vitruvius, the baths were at least six feet wide; but the basin of the frigidarium was sometimes sufficiently large to swim in. The form of the basins was either square, oblong, round, or oval; and they were of marble or other stone, bricks or bronze. The sixth apartment was the *unctuarium*, where they kept the oils and perfumes for the use of those who had bathed. The unctuarium was constructed to receive a considerable degree of heat from the hypocaustum, or the subterranean stone, which was under all the apartments of the bath. However, all baths, especially those of individuals, had not the same arrangements, as is evident from those described by Pliny, Lucian, Vitruvius, &c. Publius Victor, in his *Topography of Rome*, mentions that there were in that city eight hundred and fifty baths, public and private; and the ruins now remaining of the baths of Agrippa, Nero, Titus, Domitian, Trajan, Antoninus, Caracalla, Dioclesian, and Constantine, were published by CHARLES CAMERON, in fol. London, 1772. The pavement of the hot bathing apartment was constructed hollow, so that the pipes from the hypocaustum communicated its heat. For more ample particulars the reader is referred to the works of Vitruvius, Palladio, and the beforementioned work of CAMERON *on the Baths of the Ancients*. The Chevalier Houel describes, from actual observation, some baths of this description, which he saw in the island of Liparus at Cataneo, and several other places.

The baths or thermæ of the Romans, as well as the gymnasii of the Greeks, were sumptuously decorated with bassi rilievi, statues, and paintings; the basins were of marble, the pavements of musaick, and the vaults and cupolas splendidly decorated. The remains of those at Rome prove, more than any other of their architectural ruins, the love of magnificence and luxury which characterized the ancient Romans; and as the public baths were intended to collect together a great number of people, they were divided into so many various apartments, which afforded their architects an ample field for the display of taste and splendour of ornament. Agrippa ornamented the apartments of his baths with encaustic painting, and covered the walls of the caldarium with slabs of marble, in which were inserted small paintings. In the earlier period of the Roman history, before the arts and luxuries of Greece were much known to or practised by the Romans, their baths were small and simple, only calculated for the mere act of bathing, like that of Scipio Africanus, described by Seneca. While the ruins of the baths of Titus, Caracalla, Nero, Dioclesian, and Antoninus are the most splendid examples of these kinds of buildings, and anciently contained the finest statues that were brought from Greece. The Laocoon was found in the baths of Titus, and the Farnese Hercules in those of Caracalla. In addition to the information these splendid ruins afford, are the descriptions of Pliny and other ancient authors.

The public baths of the East are in general vast buildings, for the purpose of hot vapour bathing, and are accurately described in Denon's Voyage to Egypt. See DENON'S *Egypt*.

Among the principal public baths of the present day, are to be reckoned a few in London, of no great magnitude but of considerable conveniences; those of Bath and a few other places; many vapour baths in St. Petersburg, where this species of bathing is in much esteem; some fine ones in Florence, one of which, as a public establishment, is worthy of imitation in every large city. On the borders of the Arno is an enclosure, where there is a large bath excavated, big enough for swimming, with seats on two sides of it for the bathers, and appropriated to the public. The rest of the enclosure is divided into private baths, gardens, walks, and other pleasure grounds. The baths of Paris are much like those of London, confined to private houses, or the hotels.

MOVABLE BATHS were a species of large vases or cisterns, that stood on the floors of private or public baths, for bathing; generally formed of marble, and much ornamented with sculpture. Several of these cisterns were in Rome, at the fountains and in gardens. The most celebrated of them are those in the Farnese palace, one of which is of a single block of granite. There was also a magnificent one of porphyry, in the cathedral of Metz. The British Museum has also two of Greek or Roman workmanship, and two of Egyptian; which latter are much the subject of dispute, as to their original destination (See SARCOPHAGUS OF ALEXANDER). One of the former is an oblong square basin of granite, similar to such as were used in

the temples, to contain the water necessary for the purification of those who sought admission to the sacrifices; and the other, a beautiful highly polished cistern of green basalt; on the sides are carved two rings, in imitation of handles, in the centre of which is a leaf of ivy. In the Royal Library of Paris is also a very fine one of porphyry, which was formerly in the abbey church of St. Denys, and is called the bath of Dagobert.

Batterdeaux. See Cofferdam.

Battleaxe or Axe. *In the archaiology of painting and sculpture.* A weapon in the form of an axe used in warfare. The common axe is used in antique sculptural ornaments, to indicate an agricultural instrument, a weapon used in the sacrifices, or as appertaining to the mechanical arts. Vulcan cleft with his axe the head of Jupiter, when Minerva was produced from his brain, armed at all points. The *bipennis*, or two-edged battleaxe, called by Homer ἀξίνη, appears to have been a weapon much used by the inhabitants of Thrace and Scythia. Pisander attacked Agamemnon with a battleaxe of this description, the blades of which were of brass. The battleaxe is, however, rarely mentioned in the works of Homer, for in the field the Grecian warriors used only the sword and lance; but in naval combats the two parties used battleaxes, because the area of combat was too confined for the use of the lance. Though this weapon is more particularly attributed to the people of the northern parts of Europe and Asia, artists have sometimes given them to Grecian heroes before the time of Homer. Alcamenes sculptured upon the posterior pediment of the temple of Olympia, a celebrated Centauromachia, in which Theseus was represented fighting with an axe the ravishers of the wife of Pirithous. A basso rilievo, published by Buonarotti in the *Etruria Regalis*, represents a warrior combating a centaur with a bipennis or twy-bill. In the British Museum are several bassi rilievi of this description, one of which represents Perseus armed with a battleaxe in each hand. It is to be regretted, that in the celebrated frieze of the temple of Apollo Epicurius (the deliverer), now in the British Museum, and known by the name of the Phigaleian marbles, that none of the offensive arms with which the Amazons fought are preserved; for it would have thrown a considerable light on this subject, as we know from Virgil,

"Nunc validam dextrâ rapit indefessa bipennem;" Æn. lib. xi. v. 650.

that they used the double edged battleaxe or bipennis in their combats; and Pliny attributes its invention to Penthesilea, Queen of the Amazons, who was slain by Achilles in the Trojan war. In a fine antique painting, on a vase, published in Millen's *Monumens inédits*, which represents a combat of warriors and Amazons before the Trojan; the use this weapon is supposed to have known before the period abovementioned. Plutarch carries back the use of the bipennis among the Amazons to a date prior to the expedition of Hercules against their nation; for, according to his account, when Hercules had vanquished Hippolyte, Queen of the Amazons, he took away her bipennis, and presented it to Omphale, Queen of Lydia. This princess transmitted it to the kings, her successors, who held it in veneration as a sacred bequest, till Candaules, disdaining the custom, gave it to one of his officers. During the revolt of Gyges, Arselis, who had come to his assistance with a body of troops from Mylassa, defied Candaules, and killed him, as well as his friend who bore the bipennis. This sacred deposit was taken by Arselis into Caria, where he erected a statue to Jupiter in commemoration of his success, and placed it in its hand; calling it *Jupiter Labradeus*, from Λάβρος, signifying in Caria an axe. The figures of Jupiter Labradeus, armed like the above, are to be found on various medals and coins of Mylassa; and among the antique sculptured marbles at Oxford, is an altar consecrated to the same god, on which is the bipennis, his distinguishing attribute. The bipennis is rarely found in the hands of the armed Amazons, in very antique examples. Those beforementioned among the Phigaleian marbles, being of bronze or other metal, have become detached and lost. In more modern works it is oftener found among their arms; particularly in those habited in the Dorian costume; as may be seen in a fine statue of an Amazon thus armed, which was formerly in the celebrated Napoleon Museum, an engraving of which may be seen in the collection of engravings called the Musée Napoleon. The bipennis is also to be found upon several medals of cities, which were founded by these warlike women.

The bipennis is a weapon which no less characterizes the warriors of Thyatira than it does those of the Amazons; for as they attributed the foundation of their state to Thyatira the Amazon, they used it upon their medals as a sign of their origin, sometimes separately, and at others in the hand of Apollo their protector.

The battleaxe was also one of the arms

of the ancient Egyptians, but was principally used in their maritime operations; for in their other engagements they used long spears and crooked swords. Upon the medals of Alexandria, struck during the reigns of Hadrian and the Antonines, Neith, or the Egyptian Minerva, is armed with an axe or bipennis, precisely like those of the Amazons.

The Romans made but little use of the axe, except for the operations of carpentry, for sacrifices, and in their naval battles; it made, however, part of the insignia, being encircled by a bundle of rods, bound together with bands called fasces, which was carried before the consuls. (See FASCES.) The people of Gaul and Germany used the axe in their wars, and it was the distinguishing weapon of the ancient kings of France, whence, according to Millin, it was called *Francisca:* but Sidonius Apollinaris so calls the axe which was borne in the fasces before the ancient consuls of Rome.

The Franks, or ancient inhabitants of France, in their battles used to hurl their battleaxes at their enemies, in order to break their armour before they fell upon them with the sword. Clovis I. cleft the skull of an insolent soldier of his army at Rheims with his battleaxe, who, in defiance of his orders broke a vase, which he was anxious to restore to the cathedral of that city, to which it belonged. There is preserved in the royal library at Paris, a francisca, or bipennis, which is said to have been that of Childeric, the father of Clovis. The francisca attributed to Childeric is but a simple axe. It, however, appears that the bipennis was used in those days, for Gregory of Tours and other authors of his period give this name to the francisca. See FRANCISCA.

The nations of the east often made use of the battleaxe as a weapon in their combats. The Royal Library at Paris has several belonging to the Mamelukes, and there are also several of the same description in the armoury at Carlton Palace. M. Denon, the celebrated Egyptian traveller, has also engraven respresentations of several in his splendid work.

The bipennis or ancient battle axe was sometimes cutting on one edge and pointed at the other, like the modern halberd; and more commonly with two cutting blades of axes. This latter is the form oftenest met with in ancient representations; particularly in those of the most ancient date. The head or blades were of bronze, with a handle of wood. That of Pisander was of olive wood. The bronze was in some instances encrusted with silver, as was that which Æneas proposed as the prize in his games. The battleaxes of the Asiatic nations were splendidly ornamented, and often damasked, and inlaid with silver.

Upon many of the sepulchral monuments of the ancients are found the figure of an axe, with an inscription "SUB ASCIA DEDICAVIT,"—"SUB ASCIA POSUIT,"—"AB ASCIA FECIT," &c. This formula has given rise to many discussions, and many critics believed, for a long time, that they were only to be found on the monuments of ancient Gaul. But Gori, Gruter, Fabretti, Doni, and Muratori agree that such inscriptions have been found in and belong to other countries.

ALDUS MANUTIUS was the first who sought an explanation of these formulæ in a law of the twelve tables restricting public luxury, which forbade the Roman people to smooth with the axe, or otherwise to work the wood with which they constructed their funeral piles. He informs us that the *ascia* sculptured on these monuments indicated that they had complied with that law in erecting a tomb simple and without art. REINESIUS understands by these inscriptions, that those who are supposed to speak in the epitaph, presided over the construction of the monument from the first cut of the *ascia* which prepared the soil, to the last finish of the work by the *ascia* of the stonecutter. FABRETTI, after having referred to the before quoted laws of the twelve tables, which prohibited luxury and prodigality in the construction of their tombs, thinks that the expression "SUB ASCIA FACERE" signifies, that they had bowed to the enactments of that law by declaring that the tomb, elegant as it was, was entirely finished with the *ascia.* MAFFEI offers a curious elucidation, which he thinks he finds in a passage of Vitruvius, who mentions the *ascia* as an instrument used in the mixing of the lime, and therefore concludes that the meaning is, that the tomb is wrought, finished, and whitened with lime. This opinion he thinks confirmed by the expression "consummatum hoc opus sub ascia est," found in an epitaph reported by Guichenon; but Gruter produces many epitaphs containing *ascia*, sculptured on single blocks of marble or common stone, which had never been whitened. Father MABILLON conjectures that the ancients, in dedicating their tombs to the manes or spirits of the dead, invoked imprecations of punishments upon those who should dare to violate their sanctity and that these invocations were implied by the figure of the *ascia*, with which their

heads were threatened. According to MURATORI the formula "sub ascia dedicavit," or the ascia itself sculptured upon the tomb, was a silent but commonly known prayer, supposed to be addressed by the person there interred to the owner of the ground, soliciting him to weed its environs, to check the briars and noxious plants that would impede its view, and to keep the earth secure over the ashes of the deceased.

A weapon which Count CAYLUS has engraved in the first volume of his collection was, in his opinion, the *ascia* of the Romans; and he viewed the formula in question in the same lights as Mabillon and Muratori. He supposes that clearing the ground from the weeds and other incumbrances with the *ascia*, and a certain form of prayer and dedication, were the first ceremonies used in consecrating a piece of ground to the use and rites of sepulture, and that the inscription denoted the ceremonies complete. For more particular details the reader is referred to the discussion itself in the first volume of the Count's works.

MORCELLI, in his elaborate work on the style of Latin inscriptions, adopts the opinions of Maffei, and thinks that "sub ascia dedicavit" means that "this monument was consecrated from the first stroke of the axe." He adds, that in the Museum Kircherianum he had often seen a weeding hook of bronze, with the inscription "SUB ASCIA P," which he conceived to have belonged to some temple, and that it indicated that it had been consecrated before any person had used it. From whence he concludes that the word *ascia* denoted in general any instrument with which a work was finished. The medals of the Valerian family are inscribed with the figure of an axe (ascia), as an anagram of the proper or surname of the family Asciculus.

The inquiring reader is referred to the following works on this subject for further and more detailed particulars; namely, BUONAROTTI *Etruria Regalis;* ANT. FRANC. GORI, *Selecta Monumenta eruditæ Antiquitatis*, Florentiæ, 1750, 8vo.; MATTH. ASP, *de Stylo lapidari*, Upsal, 1737, 8vo.; JANI GRUTERI, *Inscriptionum Romanorum Corpus ex Officina*, Commel. 1603, 2 vols. fol. cum Notis; Marq. GUDII, emend. cura Jo. Grævii, Amstel. 1707, 4 vols. fol. with engravings; FABRETTI, *Inscriptiones Antiquæ quæ in Ædibus paternis asservantur*, Roma, 1699 and 1702, fol.; STEF. ANT. MORCELLI, *de Stylo Inscriptionum Latinarum, libri III.* Roma, 1780, fol.; LUDOVICI ANTONII MURATORII, *Novis Thesaurus veterum Inscriptionum*, Mediol. 1730, 1742, 4 vols. fol. with engravings; ALDUS MANUTIUS, *Quæst. p. epist.* Ven. 1570, 8vo.; SCIPIONE MAFFEI, *Museum Veronense, h. e. Antiq. Inscriptionum atque Anaglyphorum Collectio*, Ver. 1749, fol.; the works of GUICHENON, PERE MABILLON, LE COMPTE CAYLUS, *Recueil d'Antiquités*, &c. &c.

BATTLEMENTS. [from battle.] *In architecture.* A parapet or other wall, with indented interstices, in the form of embrasures, to look or fire through.

BATTLE PIECES. *In painting.* Pictures descriptive of fights or battles. Animated descriptions of battles and combats afford subjects of peculiar energy to painting as well as to poetry; for in general we love that which excites emotion, and keeps the imagination in full activity. The painter of battles who possesses genius may express passions and character in his leading figures, although, from the nature of his subjects, it may be more difficult to preserve unity of character, and to direct the action to one end, in battles than in historical pictures of a more quiet nature. Among the subjects that can possess this unity of action may be reckoned combats, such as that of the Trojans and Greeks for the body of Patroclus, the Horatii and Curiatii, the single combats between Ajax and Hector, Menelaus and Paris, &c. In battle pieces the artist has scope to give animation, spirit, and action to his figures and horses; while a bold and vigorous style, with firm and decisive touches, and freedom of outline, are preferable to high finishing, delicate penciling, or too determined outline, unless in cabinet sized pictures of a few figures. The battle painter of talent will place the heroes of his action in striking or affecting situations, and thereby decide the point of time that his picture represents. *Leonardi da Vinci*, in the 67th chapter of his *Treatise on Painting*, gives some useful observations on battle painting; and as examples of some fine battle pieces may be cited the battles of Alexander, by *Le Brun*, which have been finely engraved by *Audran*, and indifferently by the Dutch engraver *Schronebek*.

The most distinguished painters of battles are the following: *Piet. della Francesca*, who died in 1580; *Mart. Fiore*, 1610; *Es. Van de Velde*, 1630; *Ant. Tempesta*, 1630; *Paul Stevens*, 1638; *Robert Van Hoeck*, 1640; *Giov. Piet. Possenti*, 1640; *Paul de Ros*, 1640; *Vinc. Leckerbetien*, surnamed *Manciol*, 1650; *Jean Peters* and *Corn. Henri Vroom*, both for seafights, 1650; *Val Castelli*, 1659; *Michel Angiolo*

Cerquossi, surnamed *della Bataglie*, 1660; *Jean Asselyn*, 1660; *Juan de la Corte*, 1660; *Pierre Snayers*, 1662; *Gaspar Van Eyck*, seafights, 1660; *Aniello Falcone*, surnamed the Oracle of Battles, 1665; *Jean de Lin*, surnamed *Stilheid*, 1667; *Jacq. Courtois*, surnamed *Bourguignon*, 1676; *Charles Herbel*, 1680; *Charles Le Brun*, 1690; *Henri Verschuuring*, 1690; *Ant. Franc. Vander Meulen*, 1690; *Rom. Panf*, 1690; *Guill. Van de Velde*, for seafights, 1693; *Pandolf Reschi*, 1700; *Pict. Graziani*, 1700; *Const. Frank*, 1700; *Corn. Verhuyk*, 1702; *Jes. Parrocel*, 1704; *Franc. Monti*, surnamed *Brescianino delle Bataglie*, 1712; *Georges de Bammel*, 1723; *Ant. Calza*, 1725; *Chret. Reuter*, 1729; *Jean de Hugtenbury*, 1723; *Guil. Parmigiano*, 1734; *J. B.* and *Phil. Martin*, about 1735; *Georges Phil. Rugendas*, 1742; *Franc. Simonini*, 1744; *Joach. Fr. Beich*, 1748; *Ch. Parrocel*, 1752; *Franc. Mar. Raineri*, 1758; *Rob. Paton*, for seafights, 1759; *Aug. Querfurt*, 1761; *Jean Pierre Verdussen*, 1763; *Hiac. de la Peigne*, 1764. Many modern artists of the English, French, and Italian schools have obtained considerable reputation in this branch of painting; but being living artists are, of course, not mentioned in this work.

BAYEUX TAPESTRY. *In the history of the arts.* A celebrated piece of tapestry representing the conquest of England by William of Normandy, preserved in the cathedral of Bayeux in Normandy, the ancient Beducussum or Baiocas. This curious work of art is supposed to have been the work of Matilda, the wife of William, or of the Empress Matilda, daughter of Henry I. It consists of a web of linen, four hundred and forty-two feet in length, and about two feet in breadth.

BEAD. [beaɒe, Saxon.] *In architecture.* A small circular moulding usually placed on the edges of faciæ, architraves, door-cases, &c. It is sometimes carved into representations of pearls and olives, or elliptical and circular beads.

BEAK. [Βίκος, Gr. *becco*, Ital.] *In architecture.* See ROSTRUM.

BEAM. [Beam Saxon, a tree.] *In architecture.* A long and large piece of timber, into which the feet of the principal rafters, king posts, &c. are framed; intended also to tie the walls of the building together; contradistinguished from those used in the floors, which are called girders (see GIRDERS), and those which are used to support the fronts of houses, which are called brestsomers (see BRESTSOMERS); for an account of an extraordinary sized beam or girder, see AMPHITHEATRE.

BEAR. [according to Hesychius βειρός, *ursus.*] *In archaiology.* Among other wild beasts, the Romans tamed and used bears in their games and to draw chariots in public processions, the slaves who kept them were called *ursarii*, which is found inscribed on various ancient marbles. MONTFAUCON, in the thirty-second plate, part i. of the fifth volume of his *Antiquité Expliq.* has given the representation of a sepulchral urn, on which is a bear conquered by a satyr, who, in the manner of a victor, is holding a palm, and is being crowned by a winged genii or victory. In the third volume, part II. plate one hundred and fifty-eight, the same author has published an engraving from a stone representing a slave with a whip in his hand scourging a bear. On several antique Roman lamps are representations of bears led by men. There was a place formerly in Rome where was painted or sculptured a bear dressed with the *pileus*, and which was called, from this custom, *ad ursum pileatum.* The combats with bears and other wild beasts in the circus or amphitheatre, took place in the morning, and at noon they produced their gladiators; therefore the morning sports are always to be understood of the combat of beasts, and the noon of men; as may be seen in the following passage:—

> In matutinâ nuper spectatus arenâ Mucius,
> Imposuit qui sua membra focis. MARTIAL, l. 10.

BEARD. [beaɒ, Saxon.] *In costume.* The hair growing on the lips and chin. To keep up the character of correct costume, it is necessary, both to the painter and the sculptor, to know what nations encouraged, and what others shaved the beard. The Egyptians, as appears from their sculptures, shaved the beard; and Herodotus further says, that it was in mourning only that they suffered the beard and hair to grow. The Assyrians, as we are told by Strabo, (xvi.) resembled the Egyptians in this act of mourning, and permitted their beards to grow in seasons of grief. The Persians on the contrary, shaved themselves, and even cropped the manes and tails of their horses in honour of the defunct (Her. ix. 24). The heroes of Greece are represented either beardless or with a short and curled beard. Antique sculptures and ancient authors differ as to the use of the beard among the Macedonians; although Plutarch says expressly in his life of Theseus, that Alexander ordered his soldiers to shave the beard, that their enemies might not sieze them by it in battle. Moses conceived the beard of sufficient consequence to introduce a re-

gulation concerning it into his code of judaical laws (Levit. xix. 27), which arose from the leading policy of the Theocracy, which sought to create a people in every thing distinct from, and unmixed with, the idolaters by whom they were surrounded. About the time of Justinian, long beards began to be in favour both with the Greeks and Romans, who regarded them as attributes of philosophy. The Romans wore the beard for a great length of time, but it was about the year 454, A. U. C. that they began to disuse it, except in token of mourning or affliction, of being under disgrace, or as poor philosophers. Various passages in ancient authors, as Ovid (*Art. Am.* part i. ver. 108; part ii. ver. 28); Juvenal (*Sat.* xvi. ver. 32.); and Horace (lib. xi. *Sat.* iii. ver. 35 and 117; lib. i. *Sat.* i. ver. 134), prove them to have been held in contempt. On a medal of Marc Antony he is represented with a beard, indicative of his misfortunes; and on another of Augustus, struck about the years 711 or 718, he has a beard as mourning the death of Cæsar. The youth of some of the emperors is also another cause of their being represented with short beards, as it was not till they arrived at a certain age that they began to shave: Nero is thus represented on some of his earlier coins. Hadrian is the first Roman emperor from the time of Augustus, who is represented with a long and thick beard, which some critics have thought was to conceal the scars and wounds on his face, and others, with more probability, that he might assume the appearance of a philosopher; perhaps remembering the sarcasm of Diogenes, who asked a smooth chinned voluptuary, "whether he quarrelled with nature for making him a man instead of a woman," (xiii. 2). This custom was followed for several successive reigns; as the customs of Hadrian and the Antonines were venerable in the eyes of the Romans. The wretched Commodus was fearful of trusting his throat to a razor in another person's hands. Constantine the Great again introduced the custom of shaving; and Julian, as a mark of sectarism, revived the former custom of the philosophical or long beard. Till the time of Jovian, all the succeeding emperors are represented on their medals without beards; and Phocas introduced it again.

When Cæsar invaded Britain, the natives shaved their chins, and wore simple mustaches on their upper lip; and according to Diodorus Siculus and Tacitus the Germans also shaved off their beards. In France the princes of the race of the Merovingians were distinguished for their flowing locks and bearded chins; and are described by Eginhard, the secretary of Charlemagne, as sitting in council *barbâ submissâ*. From the time of Hugh Capet, the kings of the third race are more or less bearded; but Philip I. has a large beard. The statues and portraits of the French kings, the successors of Philip II. till Philip Valois, are beardless. Under this latter king beards began to be worn larger and more flowing till the time of Francis I. when they were introduced in all their philosophical magnitude, and began insensibly to decline till Louis XIV. when they were finally abolished.

From this brief view of the history of beards is proved the necessity of studying, even so apparently a trifling portion of costume as the beard, to enable the artist or critic to judge of the age of the antique statues and paintings, as well as the country of the persons which they represent. The beard has also an ideal character of an attribute, and distinguished, by its undulating curl, the Jupiter Olympius from the Jupiter Serapis, who has a longer and straighter beard; the lank beard of Neptune and the river gods, from the short and frizly beards of Hercules, Ajax, Diomede, Ulysses, &c. It is observable that Virgil (so much were long beards disused in his time), in copying Homer's famous description of Jupiter, has omitted all the picturesque descriptions of the beard, the hair, and the eyebrows of the thunderer; for which he has been censured by Macrobius and praised by Scaliger. Yet Virgil's description was the fittest for the fashions of the Romans, and Homer's the noblest for those of the Greeks. For further discussions on the beard, see a very amusing article in the miscellaneous and lexicographical department of the Encyclopædia Metropolitana; a treatise *de fine Barba*, by Ulmus, a logician of Padua, who wrote four hundred folio pages upon it, and left it unfinished at his death. Bulwer's *Anthropometamorphosis;* the various authentic collection of portraits, &c.

Bearsbreech. *In architecture.* See Acanthus.

Beau Ideal. *In painting.* See Ideal Beauty.

Beauty. [*beauté*, Fr.] *In painting, sculpture, and architecture.* A term of most extensive application, which denotes that assemblage of agreeable forms and graces which charms or pleases the senses, particularly the eye and ear; as colour, form, and motion, and their several combinations. Although much has been written

on the principles of beautiful forms, yet nothing has been positively decided as to the nature and properties of abstract beauty itself, even if such a quality be acknowledged.

If an Asiatic artist was to treat this subject, his principle, it is evident, would differ from that of a European. This must not, however, prevent us from studying our own principles of beauty, as they are the foundation of the ornamental part of sculpture, painting, and architecture; and govern the proportion of the human figure. Modern artists seem to have implicitly adopted Grecian ideas; which circumstance may account for the prevalence of the antique profile in modern pictures, which is certainly a great inconsistency, when the subjects are chosen from any other than Grecian history; there being one principle of beauty in the form of the Greeks, another in that of the Romans, and another in that of the modern Europeans, and yet they are all beautiful. Professor Camper, in his book upon the different forms of the human cranium, has endeavoured to trace this style of the straight or Grecian profile from a probable source. The projection of the mouth and depression of the forehead, with a flat nose, marks that kind of face which is the nearest allied to the brute creation; there being but one degree between a dog, monkey, ape, ourang-outang, Calmuc, and negro. From the negro to the European countenance are many degrees, which may be traced by an attentive study of the human species; and again, between the best modern faces and those of the antique, there are also many gradations of form and outline. Perhaps from the Greeks observing the resemblance between the lowest class of human countenances and those of monkeys, may be the reason why they conceived beauty to be as far as possible removed from all resemblance to them. As the lower part of the brutal face projected, in such proportion they thought the same position of the human face should recede; and as in the former there was a descent from the forehead to the nose, in the latter it should be perpendicular. As a small space between the eyes gives the appearance of an ape, they made the distance of man wide. As a great breadth of cranium at the eyes, ending above in a narrow forehead, and below in a pointed chin, marked the face of a savage; they gave a squareness of forehead and a breadth of face below, to express dignity of character. Hence may be the origin of that ideal beauty, which has occasioned so many feuds and schisms in art, and which nothing but a recurrence to nature, who is seldom wrong, can remedy. See Ideal Beauty.

Bed. *In costume.* See Couch.

Bed. [*bedden*, Germ.] *In architecture.* A course, layer, or range of stones; also the plain surface on the under side of stones or bricks, which is placed on the cement. The upper part being hollowed to receive it.

Bed Mouldings. *In architecture.* Those mouldings in a cornice which are situated between the under side of the corona and the upper side of the frieze; they differ according to the order they belong to. See Order.

Belfry. *In architecture.* A tower or other place where bells are hung. This word is derived from the French *beffroi*, and Menage in his dictionary gives himself much trouble to discover its etymology; which he explains in one place, as from *bis-effrois;* but the most probable is that of Ducange, who derives it from *bell* a clock, and *fried* peace. The form of a belfry must be according to its situation and application, and therefore must be left in its design to the discretion of the architect. See Spire, Campanile.

Bellona. *In the mythology of painting and sculpture.* The goddess of war, and sister or wife, or sister-wife and charioteer of Mars. The temple of Bellona, in Rome, stood in the *Circus Flaminius*, near the Porta Carmentalis, and was the place where foreign ambassadors, and generals returning from their campaigns were received by the senate. Before its gates was raised a column, called *Columna Bellica*, against which a javelin was hurled as one of the previous forms in the declaration of war (Ov. Fast. vi. 201). Her priests were named after her *Bellonarii*. Lactantius (i. 21.) describes them as cutting their flesh most ferociously in her worship: and Tertullian (4 and 9 *de Pallio*) adds, that having collected the blood, which flowed from these gashes, in the palms of their hands, they pledged the Neophytes, who were initiated into their mysteries, and then broke out into the ravings of vaticination.

Belvedere. A beautiful view. *In architecture.* The name of a house which commands a fine prospect; or of a small temple or other erection, built on an eminence or on the top of a house, for the purpose of enjoying a fine prospect. In Italy, particularly in Rome, almost every large house and palace has a belvedere attached to it. The finest of these buildings are the

Palazzo Pontifico nel Vaticano, called the Belvedere, from the beautiful views which it commands of the Campagna and the city of Rome. This building contains a splendid collection of antique sculptures, &c. called *the Museum Pio Clementino;* from whence the celebrated statue of Apollo received its name of the Belvedere Apollo, which, with the group of the Laocoon, and many other admirable pieces of sculpture, are among the most valuable monuments of ancient art in Rome.

BENCH. [Benc, Saxon.] *In architecture.* A seat. The seat or benches of the ancients, as may be conjectured from various remains of art and ancient writers, were of various forms and materials. The *subsellium* was a species of throne for heroes or kings; the *curule chair* was appropriated to the magistrates; and when represented on medals, as on those of the families of the Lollia, Cornelia, Cestia, &c. denote the families to be of that order. (See THRONE, SEAT, &c.) The range of benches in the Grecian and Roman theatres were appropriated to different classes of people. In the former the first row were reckoned the most honourable, and were reserved for the agonotheta or judges, who decided on the pieces represented, and decreed the rewards; also to magistrates, to military chiefs, and priests; which places were taken by the magistrates in the public assemblies of the people, that were held in the theatres. The benches behind these were the places of the youths. The higher and more distant seats were filled with the rest of citizens and common people. In Athens the benches of the rich were covered with cushions, and had carpets under them for their feet. In the Roman theatres the orchestra was reserved for the senators. In the most ancient times they had no particular seat, but were intermixed generally with the audience. This custom was abolished by the two ædiles, Atilius Serranus and Lucius Scribo, by the advice of Scipio Africanus. After which time the patricians were always separated, in the theatres, from the plebeians; but this innovation was the cause of Scipio almost losing the favour of the people. The senators occupied the seats of the orchestra, not even ambassadors or foreign sovereigns being permitted to sit there. The benches were of wood, and the prætor's seat alone was a little elevated above the rest. Caligula afterwards allowed them to use cushions. In the other seats there was no distinction from the most ancient times of the republic. From the time of Pompey they preserved a particular row for the knights, and upon the proposition of Lucius Roscius, a tribune of the people, the first four rows of benches were appropriated to them. This law was observed under the emperors; but the number of Roman knights having been considerably increased, these four rows were not sufficient. Augustus made several new arrangements relative to the benches. The soldiers had particular ones, divided from the rest of the people. The seats immediately behind those of the knights were assigned to the younger branches of eminent families and their tutors; behind them were the most distinguished plebeians; and again behind those, being the most elevated, were the commonalty. The women, who were formerly seated among the men, were now only allowed the space behind the last mentioned; except the vestals who had a seat in the orchestra, near that of the prætor. Afterwards the place before the lower rows of seats in the orchestra was considered a place of distinction, they called it *Podium,* and it was sufficiently large to place two rows of seats. See THEATRE.

BENEVENTO. *In the history of the arts.* The capital of a small duchy of Italy situated on a steep declivity, and at the point of a hill between two narrow valleys. Few places in Italy, except Rome, can boast of more antiquities than Benevento; one of the most celebrated of these remains is the triumphal arch which was erected A. D. 114, in honour of the Emperor Trajan (see TRIUMPHAL ARCH). It is now one of the five gates by which the city is entered, and is called *porta aurea.* Benevento also possesses several fine pieces of ancient sculpture, and those of a Roman amphitheatre.

BENTVOGEL SOCIETY. *In the history of painting.* A celebrated society of Flemish painters, established at Rome, into which they received all of their own nation who came to reside at Rome, and desired to be admitted as members. The introduction was made at a tavern, where a repast was prepared at the expense of the new member, when, after some whimsical and burlesque ceremonies, he was inaugurated with a new name, expressive of some peculiarity of person or style, as Peter Van Laen was named by them, Bamboccio; Philip Roos, Rosa da Tivola, and others with the various sobriquets or nick names, by which they are known. The ceremony was kept up all night, and in the morning they marched in procession to the tomb of Bacchus, where it concluded. See PILKINGTON'S *Dictionary of Painters,* &c.

Bevel or Bevil. *In architecture.* Any angle that is not a right angle or square, or is more or less than 90 degrees; but if it has an angle of 45 degrees, it is called a *mitre.* Also an instrument resembling a square, but having its blade movable for the proper adjusting of angles for the workmen. It differs from the square and the mitre, the blades of which are fixed at their relative degrees of aperture.

Bible. [βίβλος, Gr.] *In the history of the arts.* The collection of sacred writings or the holy scriptures of the Old and New Testament, so called by way of eminence. This book has furnished more subjects for the pencil and chisel of modern art than any other in existence; many of them have been illustrated by engravings from the works of the greatest artists; among which may be reckoned as the principal, either for antiquity or beauty, a celebrated one with wood cuts, described by Camus, in his treatise "*sur un Livre imprimé a Bamberg.*" Raffaelle's Bible; the *Artist's Bible,* a magnificent copy, published in Holland, with engravings after the best works of the greatest masters; Macklin's Bible, by British artists, published in London; and one engraved by Fittler, from old masters, and published by Bowyer, London, are among the principal illustrated bibles.

Bice or Bise. [*bisius,* Lat.] *In painting.* A pale blue colour prepared from the lapis armenius (smalt), being inclined to be sandy. Bice requires good and careful grinding, and after ultramarine (which is too expensive for common use), it is one of the best of blues. A green colour formed by mixing the blue with orpiment, bears the same name; as do also certain compositions of indigo and verditer with chalk.

Bident. [*bidens,* Lat.] *In pictorial and sculptural archaiology.* An instrument or weapon with two prongs. The bident has been improperly attributed by modern artists to Pluto instead of a sceptre which is given him by all the best writers of antiquity. Ovid particularly describes him (Met. 5. v. 420) as holding a sceptre. See Sceptre.

Bidental. [Lat.] *In Roman archaiology.* From the *bidentes oves* or two toothed (two year old) sheep which was offered to the gods at the death of any person by lightning. The place where an occurrence of this nature took place, was immediately deemed sacred, enclosed with a wall of stones, and the body of the sufferer buried therein. The place was called *Bidental* from the sacrifice being a sheep of two year old; and there were priests especially appointed to perform the necessary ceremonies wherever such an incident occurred; the Romans considering it as an indication that the gods desired to have such a spot sacred to their worship.

"Minxent in sacros cineres, an triste bidental
Moverit incestus." Hor.

Bipennis. [Lat.] *In the archaiology of art.* See Battleaxe.

Birds. [bird or brid, Saxon.] *In archaiology.* The general name of the feathered class of creation. On several sarcophagi of the earlier Christians are sculptured, birds devouring fruit; and as they are mostly pigeons, it has been supposed they were intended as symbols of the soul, nourished by the fruits of faith in Christianity. But these figures cannot have the same meaning on the tombs of the Pagans, where the same symbols may be found. In vol. i. plate 13, of *Monumens antiques inédits,* by A. L. Millin, is an engraving of a sarcophagus, whereon is represented baskets of fruit being overturned by birds, and which he conjectures to be an emblem of the destruction of the body, and the cessation of life. According to Clemens of Alexandria, quoted by Winckelman, the early Christians used the representation of a bird (perhaps a dove, the usual personification of the Holy Spirit) on their rings and seals.

Biremis. [Lat.] *In the archaiology of art.* An ancient ship with two rows of seats for the rowers. A galley.

Birrus. [βίῤῥος, Gr.] *In archaiology.* A short woollen cloak worn by the Roman soldiery.

Biscuit. [Fr. from *bis* and *coquo,* Lat.] *In sculpture.* Twice baked. A species of white baked clay, with which figures and groups are formed. A sort of unglazed porcelain.

Bistre or Bister. *In painting.* A colour made from the soot of dry wood, of which beech is the best, boiled half an hour in water, of the proportion of a gallon to two pounds of soot. After it has settled, the water is poured from it, and when evaporated to dryness and made into cakes with gumwater, it is good bistre. Bistre is much used by architects and painters in washing their drawings and sketches. The king of Great Britain has a considerable number of fine drawings in bistre by the old masters; and there are also a great quantity of them in the salle D'Apollon, in the Louvre at Paris.

Biting. *In engraving.* The act of corrosion upon copper by aqua fortis, for the

purpose of executing etchings, aquatints, &c. See ETCHINGS.

BITUMEN. [*bitumen*, Lat.] A fat unctuous matter dug from the earth or scummed off lakes, and used by the artists as a cement. Liquid bitumen is still the principal cement both in Japan and China, where it abounds. Semiramis also used it in building the walls of Babylon. See CEMENT.

BLACK. [blac, Saxon.] *In painting.* The darkest of all colours. This colour absorbing all the rays of light and reflecting none, occasions its darkness. There are several species of blacks used in painting, of which the following are the principal. FRANKFORT BLACK, of which there are two sorts, one a natural earth inclining to blue; and the other made from the lees of wine burnt, washed, and ground with ivory, bones, or peach stones. This black is much used by the copper-plate printers, for their fine ink to work their engravings. IVORY BLACK is burnt ivory, or bones reduced to powder, and ground in oil or water as required. SPANISH BLACK is burnt cork reduced in a similar manner. HARTS BLACK is that which remains in the retort after the spirits, volatile salt, and oil have been extracted from hartshorn, and when properly levigated, answers the purpose of painters nearly as well as ivory black. LAMP BLACK is originally the soot collected from lamps, but is generally prepared in England at the turpentine manufactories, by burning the dregs after the refining of pitch or other resinous matter, or small pieces of pitch pine in furnaces constructed for the purpose; the smoke is made to pass through a long horizontal flue, terminating in a close boarded chamber, which has its roof covered with a coarse cloth, through which the air passes, and leaves the soot or lamp black behind. The goodness of this black depends much on its lightness and depth of colour.

BLACKLEAD. *In drawing.* A mineral used for making pencils for artists; called also Graphite and Plumbago. It occurs naturally in large roundish masses, imbedded in different kinds of rock. The most extensive mine of it in the world is, at present, that at Borrodale in Cumberland.

BLOCK. [from the Teutonick.] *In sculpture and architecture.* A square mass of marble or other stone. The ancients used blocks of stone in their architectural works, of a prodigious size. (See ARCHITECTURE, *Egyptian*, *Grecian*, &c.) The art of masonry or construction in stone has been brought by the moderns to such perfection that large blocks of stone are not so necessary in our constructions as in those of the ancients (See CONSTRUCTION). The largest blocks of stones that have ever been removed from their quarries, and used in building by the art of man are the roof of the temple of Latona at Butis, which Herodotus affirms was brought from the island of Philæ, a distance of nearly two hundred leagues, and contained above fourteen thousand five hundred cubit feet, being above sixty feet square and four feet thick; the immense obelisk in the front of St. Peter's at Rome; the two basins of granite in the British Museum; the great rock which serves for the pedestal of the statue of Peter the Great at St. Petersburg; the two angles of the pediment belonging to the perystyle of the Pantheon at Paris, each of which measures nine French feet square by five high; and contains more than four hundred cubit feet of stone. See CONSTRUCTION.

BLOCK BOOK. See ENGRAVING.

BLOCK ENGRAVING. See ENGRAVING.

BLOCKING COURSE. *In architecture.* The course of stones or bricks erected on the upper part of a cornice to make a termination.

BLOOD STONE. *In gem sculpture.* A species of heliotrope, so called from the blood coloured spots of jasper with which it is mixed. See HELIOTROPE.

BLUE. *In painting.* One of the seven original colours. This colour, for the use of painters, is variously prepared; the best is ultramarine, which is prepared from lapis lazuli, finely pulverized by ignition, quenched in a strong acid, and subsequently levigated. The principal blues used in painting, are, PRUSSIAN BLUE. This excellent colour is so named from its discoverer, Diesbach of Berlin, who in precipitating a decoction of cochineal with fixed alkali, unexpectedly found a beautiful blue precipitate formed. There are various ways of making it, for which see URE's Chemical Dictionary. BLUE BICE is a colour next to Prussian blue in quality (See BICE). INDIGO BLUE is a chemical extract from the colouring matter contained in the plant anil, or the indigo plant.

BOAR. See WILD BOAR.

BOLDNESS. *In all the arts.* The Anglo Saxon words byldan, byld, bylded, bold, and bolt were used indifferently for what we now call a building (builden) or strong edifice. In art the epithet means fearless, firm, strongly constructed, and characterizes the artist who, certain in his aim, and grounded in the soundest principles of his

art, builds, designs, paints, or sculptures with intrepidity and dauntless courage. Such was Michel Angiolo in all his works, particularly in his sculpture, at which he worked as if inspired, and was only knocking off the incumbering marble which concealed his figure. Such were also the unknown architects of our Gothic cathedrals, and such were most of the painters of the Italian and Roman schools. Boldness in art, if tempered by knowledge, gives a vigour to all its productions that is sure to charm. Its opposite is tameness or insipidity.

BOLOGNESE SCHOOL. See SCHOOL.

BONES. See OSTEOLOGY.

BOOTS. *In costume.* Coverings or protections for the legs. The Roman soldiers wore boots protected by nails, which came half way up the leg, and were called caligæ, from Καλίγα; whence Suetonius (l. 2. c. 25.) calls the common soldiers *homines caligati.*

BORDER. [from *bord*, German, *bordure*, Fr.] *In all the arts.* The outer part or edge of any thing. This term in art is applied to the outer part, which is raised, being either square, round, or otherwise, and often sculptured, painted, or gilt, and applied to the exterior extremities of pictures, panels, or bassi rilievi. The borders on the vases of the ancients are remarkable for their beauty and elegance, and are mostly composed from the leaves of different vegetables, as the acanthus, the honeysuckle, the polypodium, or oak fern of Pliny, and sometimes of the circular or angular mæander or scroll. In others they are composed from the foliage of animals, which may have given rise to the style called arabesque. (See ARABESQUE.) The borders of these kind of vases, of which a splendid collection are in the British Museum, in Mr. Thomas Hope's collection, and also in a collection published by M. Tischbien, have been copied and used as borders to vestments. (See ACANTHINÆ VESTES.) Wherever the foliage border or mæander was employed, the Greeks always placed the former on the upper part, and the latter on the lower part, as a base. See MÆANDER.

BORGHESE. See VILLA, PALACE, ROME.

BOSSAGE. [Fr.] *In architecture.* A projecting stone which is intended to be sculptured. Also rustic work which projects beyond the plain face of the masonry. See RUSTIC.

BOUDOIR. [Fr.] *In architecture.* A small apartment or cabinet for private retirement; generally situated near the bedchamber and dressingroom, and mostly appropriated to the use of the females. The boudoir requires much luxurious ease in furniture and decoration; the light should not be glaring by too many windows, and the most cheerful aspect should be chosen for it. Its furniture may be sofas and couches; its decorations small and delicately finished pictures, small statues, vases, gems, and other delicacies of art. Boldness of finishing and grand subjects should be left entirely for the gallery. See CABINET, GALLERY.

BOW. *In architecture.* A circular end to a church, a room, or building.

BOW. *In the arts.* An engine of war. The bow is one of the most ancient weapons of offence, and differs much in shape among various people, although its mechanism is upon the same principle. The oldest bow on record is that of Pandarus, described in the Iliad (IV. v. 105, et seq.) which he made at the suggestions of Minerva for the purpose of shooting at Menelaus. Being described by the poet with great accuracy, it may be of service to the artist to quote it as an example of an antique bow. "He drew forth his polished bow, made from a wanton wild goat which he once striking on the breast had pierced to the heart. His horns grew from his head of the length of sixteen palms, and the artist, the polisher of horns, had with labour prepared them, and having smoothed every part properly, put upon them a golden tip."——"The string he moved close to his breast, and the iron of the arrow to the bow." In the East the horns of the antelope are still in like manner fashioned into bows. They consist of two pieces firmly jointed at the centre, and seldom exceed four feet in length.

The Grecian bow is observed by Montfaucon (iv. 68.) to be uniformly sculptured in the same manner in the monuments which are left to us; and he describes it as closely resembling the letter Σ.

The Scythian bow was distinguished by its remarkable curvature. When unbent it was almost semicircular; when strung the ends which were before inflected were drawn on the opposite sides, and it differed but little from the ordinary bows of Greece. The Scythians are said to have been ambidextrous.

The Roman archers, or *sagittarii*, were attached to the regular legion as light troops. Cæsar often makes mention of his Numidian and Cretan archers. In the time of the succeeding emperors, as we learn from Dion Cassius, and other authorities, the bow was much in use in Britain. Our ancestors, before the discovery of gun-

powder and the invention of fire arms, excelled in the use of the bow. See ARROW.

BRACELET. [from the Latin *brachiale; brasselet*, Fr.] An ornament or piece of armour worn on the arm. The bracelets of the ancients were often ornamented with the richest gems sculptured in the finest manner. Those of the Grecian females were mostly representations of serpents, such as are on the wrists of a pretended statue of Cleopatra, in the Vatican; but which is now more properly called Ariadne asleep. (See ARIADNE.) The Roman generals distributed bracelets called *armillæ*, as marks of valour to the bravest of their soldiers.

BRACKET. [*brachietto*, Ital.] *In architecture.* A small support against a wall for a figure, lamp, clock, &c. which are susceptible of considerable elegance of design and decoration.

BRANCHIDÆ. *In archaiology.* The priests of a temple of Apollo at Didyma in Milesia. The temple stood on the promontory of Posideium, rather more than two miles from the sea. It was of great antiquity, long anterior to the Ionian migration. After many vicissitudes the Milesian temple was rebuilt, with great magnificence, about the eighty-seventh Olympiad. The names of its architects, Peonius of Ephesus and Daphnis of Miletus, have descended to us through the care of Vitruvius, who numbers it among the four temples, the splendour of which deserved to immortalize their builders.

BRASIER. [from brass.] *In domestic architecture.* A metal pan for burning charcoal, &c.; the Greeks and Romans having no chimneys in their apartments, they used pans, in which they placed lighted coals for the purpose of warming them. These were made of different metals, but most commonly of brass, and are therefore called brasiers. Caylus has published some ancient brasiers, which are supported by a tripod. A number of them were found in the ruins of Herculaneum and Pompeii, of which the greatest part have been engraved in the 3d volume of the Bronzes found at Herculaneum. In 1761 a square pan, or bronze grate was discovered, in a temple of Herculaneum, like those used in Italy for heating the large apartments. It is as large as a middling sized table, and placed upon lion's paws. The borders are inlaid with foliage worked in copper, bronze, and silver. At the bottom was an iron grating, very thick, supported or walled up with bricks above and below, that the coals might not touch the under part of the grating, nor fall through at the bottom. This fine example was taken out in pieces. They use no other manner in Italy at present to heat the apartments, than by means of pans, which are proportioned to the size of the rooms, and ornamented according to the opulence of the proprietors. In most palaces they are of silver: the greatest number are of copper, and the most common form is a basin, supported by a border of wood, plated with copper, which rise from three to four feet. In ancient churches they used a pan mounted on wheels to warm the priests and assistants.

BRASS. See BRONZE.

BREASTSOMER. See BRESTSOMER.

BRECHIA, or BRECCIA. See MARBLE.

BREECHES. *In costume.* A garment reaching from the waist to the knees. The Greeks wore their knees and legs bare, but the more barbarous nations of antiquity covered them with vestments, which were called *ἀναξυρίδες*, These vestments were also worn by the Scythians (see Philost. Icon. lib. ii. 5, and the Phigaleian Marbles), the Aramaspi, the Amazons, the Phrygians, Syrians, &c. Among the Greeks this garment indicated slavery, and thence foreigners, or slaves brought from other countries were always represented so clothed by their artists. The nations of the north, as the Dacians, the Parthians, the Sarmatians, &c. usually wore them, as may be seen by the sculptures on the Trajan column. They were also worn by the Gauls; and that part which was under the Roman dominion was called *Gallia Braccata* from this circumstance.

BRESTSOMER, or BRESTSUMMER. *In architecture.* Pieces of timber laid horizontally on piers or posts, into which the joists of a floor are framed. When this happens in the ground floor it is called a sill, and when to the upper a beam.

1. BRICK; 2. BRICKLAYER; 3. BRICKLAYING; 4. BRICKMAKER; 5. BRICKMAKING. *In practical architecture.* 1. [*brick*, Dutch, *brique*, French.] A mass of argillaceous earth, sometimes mixed with coal ashes, chalk, and other substances; formed in cubical moulds, dried in the sun, and baked into a kind of artificial stone for the use of builders. 2. An artisan who builds with bricks, and whose business consists of building walls, &c. with brick, under the direction of an architect, or bricklaying proper, tiling of its several kinds, and paving with bricks or tiles; to which is sometimes added, building and constructing ovens and furnaces, setting stoves, coppers, stills, &c. 3. The art of building with bricks. 4. One whose trade it is to

make bricks. 5. The art of making bricks.

Bricklaying. The art of bricklaying or building with bricks is of great antiquity, and appears to be coeval with the earliest buildings on record. Josephus relates that the children of Seth erected two pillars, one of *brick* and the other of *stone*, on which they engraved the principles of astronomy. The walls of Babylon, which are attributed by Herodotus to Semiramis, and a pyramid in Egypt, described by the same author, were built with bricks, which were a common and durable material among all the nations of antiquity. Pausanias mentions several temples and other structures built with bricks in various parts of Greece; and Rome, we know, abounds with many large and splendid edifices thus constructed.

Brickmaking. The art of making bricks for building has been variously practised among different nations of every period. The bricks of the ancients differed from ours inasmuch as they were dried in the sun, instead of being burnt or baked by fire, and were mixed with chopped straw to give them a tenuity of substance. Brickmaking, we are informed in sacred history, was one of the laborious indignities by which the Israelites were oppressed during their bondage in Egypt.

The ancient Babylonians often impressed or engraved inscriptions on their bricks, in a character which has given rise to much discussion among the learned. Specimens of them may be seen in the archaiological department of the British Museum, the Museum of the East India Company, and in the library of Trinity College, Cambridge.

The ancient Greeks chiefly used three kinds of bricks, the *Διδωρον*, bricks of two palms in length; the *Τετραδορον*, those of four palms; and the *Πενταδορον*, those of five palms.

The Romans, from a comparative deficiency of marble, built more with bricks than the Greeks, and sported more with the powers of the arch and the vault, to which this useful material so much contributed, than their predecessors. Their perfection in this art may be dated from the decline of the republic, and during the splendid times of the Cæsars. The bricks most in use among the Romans, according to the authority of Pliny, and those discovered in various parts of England were about seventeen inches long and eleven broad (English measure), and scarcely thicker than our paving bricks. Palladio, Sir Christopher Wren, and other eminent modern architects have constructed beautiful and well proportioned edifices in brick, and proved it to be as fit for domestic architecture as stone.

Bricks, as manufactured in England, are always burned or baked. Unburnt bricks, after the ancient mode, are still in use in Egypt and many parts of the East. The modes of making bricks in this country are various. Those manufactured in the country differ from those made in the neighbourhood of the metropolis, and are known by their colour, the former being a deep red, and the latter yellow, stone colour, and gray. The country bricks, which are baked in a kiln, are made of a stronger earth, and have no internal firing. But the London method is beginning to be adopted near all large towns, both in England and in Ireland, where cinders and coal ashes can be procured; and by far the greatest quantity of bricks are now made in that manner. For a very particular description of the various modes of making bricks, as practised by the best makers in England, see the article Brick in the Lexicon of the Encyclopædia Metropolitana.

Bridge. [*brygga*, Swed.] *In architecture.* A building erected over rivers, &c. for the conveniency of passage. Bridges are among the noblest works of art that man is capable of performing, and are constructed either of carpentry, masonry, iron, or temporary constructions of boats, &c. The necessary component parts of bridges are arches, piers, abutments, parapet walls, raised footways for passengers, a paved road for horses, carriages, &c. decorated according to the taste of the architect, and accommodated to the necessities of the place. A bridge should be erected in a rectangular direction to the line of the stream, and should not, if possible, be in a narrow part of the river on account of the greater velocity of water in such parts. The number of arches are generally made unequal, that the centre may have an opening to receive the current, instead of a pier to stop it and endanger the safety of the bridge. Bridges should be formed of as few and as large arches as possible; and one single arch, when the situation of the place will admit, is best. One of the most ancient bridges mentioned by historians is that which, according to Herodotus (i. 186), Queen Nitocris constructed over the Euphrates at Babylon. Diodorus Siculus reports this bridge to have been five furlongs long. Rollin, in his Ancient History, supposes it could not have been so long, as the Euphrates, at Babylon, was

generally only one furlong in width; but as at particular seasons it might have been more, the length of the bridge was commensurate, no doubt, to the width of the river during its overflow. This bridge was very far from the perfection of modern works. It consisted only of several large stone piers, built at equal distances and without arches, upon which they placed lintols or pieces of timber to enable them to pass from one to another.

It would appear that the Greeks, who were a maritime people, and more accustomed to navigation than the ancient Romans, did not value the construction of a bridge so much, nor succeed so well as the last named people. In their brightest days, when their fine style of architecture was complete, when their porticoes were crowded with paintings, and their streets with statues, the people of Athens were compelled to wade the Cephisus for the want of a bridge. The Romans did not distinguish themselves by the extraordinary size of the arches of their bridges, their span seldom exceeded sixty or sixty-five feet. The form of the arch was the most simple of all, being either a semicircle or a very extended portion of a circle, which rested upon the piers or arch next the land: which is a form that the imagination prolongs to complete the sweep. Solid piers, at least a fifth, often a quarter, sometimes a third, and even at times more, of the width of the arch, support them. A foundation composed of huge blocks of the hardest stone or marble, supported the piers; and massive decorations, agreeing with the subject, gave these buildings a beauty and simplicity of form which modern architects have too often neglected. These ancient bridges convince the eye at one view by means of their real and scientifically formed voussoirs of their real strength. The greatest part of them afterwards were employed as bases to support trophies, colossal figures, heroical or rostral columns, triumphal arches, and similar ornamental structures. Such was the triumphal bridge of Ælius, and such the bridge of Augustus near Rimini. When they thought it necessary, for the sake of greater solidity, to give a greater thickness to their piers, they sometimes turned counter arches in them; and when they were narrower they left this part solid, and placed decorative niches in them for effect, as in the aforesaid bridge of Augustus at Rimini, one of the finest works of the Romans of this kind, and which a few years since was in admirable preservation. The bridges which most approach, in their form and boldness of decoration, to the plan of the ancients in this respect, are, that at Paris, called Pont Neuf, began in 1578, from the designs of J. Androuet du Cerceau, and finished in 1604, under the direction of G. Marchard; the Pont de Neuilly over the Seine by Perronet; and the Waterloo bridge over the Thames by Rennie.

The bridges at or adjacent to Rome were eight in number. The most ancient was that called *Sublicius*, because it was constructed with girders or beams of timber, put together without iron bolts or nails. It was situated at the foot of Mount Aventine, and served to unite the valley at the bottom of that hill to the Janiculum. It was this bridge that Horatius Cocles defended with so much courage, and was for a time called from this circumstance *Pons Horatius*. It was rebuilt of stone by Emilius Lepidus, and thence called *Pons Emilianus;* Tiberius repaired it; when having again gone to ruins, it was rebuilt by Antoninus Pius in marble, and then took the name of *Pons Marmoratus*. At present there is hardly any remains of it.

The triumphal bridge near the Vatican, which is also called *Pons Vaticanus*, is the next in succession of the bridges of Rome, it leads from the Campus Martius to the Vatican; and its supposed remains are still to be seen near the hospital San Spirito. The generals who had obtained triumphal honours for victories gained in Spain and Gaul passed over this bridge to make their triumphal entry into the city.

The *Senatorial Bridge* was placed between the Forum and the Janiculum: it had this name because the solemn processions or entries of the senate passed over it. Marcus Fulvius built the piers; the arches were finished and vaulted under the censorship of P. Scipio and L. Mummius. At present this bridge has the name of Santa Maria, but it is nearly in ruins.

Two other bridges form the communication between the city and the isle of Tiber: the one called after the name of Fabricius, who built it, being *curator viarum* (intendant of the roads), during the conspiracy of Catiline, as is seen by the inscription at present remaining. A Janus Quadrifons placed near it has given it the name of *Ponte di quatro Capi;* it is also called the Jew's bridge, because their quarters are near to it. The other bridge, which made the communication between the island with the Janiculum, was named *Pons Cestius*, and was built by Cestius Gallus, in the time of Tiberius; it was repaired by

the Emperors Valentinian, Valens, and Gratian, as appears by a long inscription. At present it bears the name of Ponte Santo Bartolomeo, from the adjacent church of that name.

The Pons *Janiculensis*, or of *Aurelius*, which leads from the Campus Martius to the Janiculum, was rebuilt in marble under the reign of Antoninus Pius; rebuilt by Sextus V. it received the name of Ponte Sisto.

The bridge *Ælius* or *Hadrianus*, from the name of the emperor who built it, remains to the present time; it passes the Tiber, and unites the city to the fortress which succeeded the Moles Hadriani, or Hadrian's Mausoleum, now called Castel Sant' Angelo. The Popes Nicholas V. and Clement IX. caused it to be restored, and placed upon the balustrade, on each side, a series of colossal statues of angels, who bore the instruments of the punishment of the Saviour, from whence it derived its present name, Ponte di S. Angelo, and is the finest bridge in Rome.

Pons Milvius (now called Ponte Molle since Pope Nicholas repaired it) was built in the time of Sylla, under the Censor Marcus Emilius Scaurus. It was upon this bridge that, by order of Cicero, the ambassadors of the Allobroges were stopped, and their letters seized, which discovered the conspiracy of Catiline.

The eighth and last bridge is three miles from Rome, upon the Anio or Teverone leading to the Via Salario, called at present *Ponte Salario*, from Salarius. By an inscription it appears that Narses rebuilt it after its destruction by Totila.

There are other bridges in the environs of Rome; as the bridge *Lucarius* upon the Anio or Teverone, built probably under the Emperor Claudius during his expedition against the Britons. The bridge *Mammæus* or *Mammolus*, built by Alexander Severus, upon the Anio near Rome, and thus called in memory of the mother of that prince; the bridge *Nomentanus*, upon the same river, over the Nomentana, now called Ponte della Montana. Plans and descriptions of several of the bridges mentioned in this article may be found in *Recueil et Parallèle des Edifices de tout Genre, anciens et modernes*, &c. by I. N. Durand and J. G. Legrand, plate 22.

The bridge of Trajan was built by that emperor, over the Danube, to facilitate his irruptions into Dacia. According to the description of Dion Cassius, it had twenty piers, which, without reckoning the foundations, were one hundred and fifty feet high and sixty wide. They were united by arches of one hundred and seventy feet span. Paulus Jovius gives them thirty-four piers, and the Count de Marsigli, in his work descriptive of the Danube, only twenty three. Authors have differed much about the situation of this bridge. The celebrated geographer Busching has given very plausible reasons to suppose that it was situated between Zernigrad, a ruinous castle upon the Danube, and Czernecz, a town inhabited by the Valachii, about two leagues below Orsova, in a place where the Danube is but a thousand paces wide. This bridge did not remain any considerable time; for Hadrian caused it to be demolished, and put Apollodorus, its architect, to death, assigning as a reason that the bridge had facilitated the irruptions of the barbarians into the Roman empire, but really through jealousy and pique. Several authors have charged Dion Cassius with exaggeration in what he has reported of this bridge; but Montfacon errs in opposing to his descriptions the representation of it upon the Trajan's column (engraved, among others, in *Antiquité Expliquée*, 4th vol. part II. pl. 115), because it was not intended in that place to give a portrait or even an idea of the extent or beauty of the bridge, but merely an indication of its existence.

The bridge of *Alcantara* upon the Tagus is spoken of as one of the most beautiful remains of Roman splendour. From an inscription it appears to have been erected by a governor of the country, in honour of the Emperor Trajan. This bridge is six hundred and seventy feet long, and formed of six arches, of which each is twenty-four feet span. The piers are square, and are twenty-seven or twenty-eight feet across. The height from the surface of the water is two hundred feet.

The most imposing and superb work of this class, left us by the Romans, is that known by the name of the *Pont du Gard* (engraved in *Antiq. Expliq.* vol. iv. part II. plate 116; and in the collection of M. M. Durand and Legrand, plate 24). It is built over the space between two mountains, and forms a continuation of the aqueduct that conveys the water of the springs of Euve to Nimes. It surprises the spectator by the height of the third story or order, for three bridges are placed one upon the other: the first has six arches, the second, eleven, and the third, thirty-six. It serves two purposes besides the aqueduct, which is in the third tier; the first

gives a free passage over the river. It is not less admirable for its proportions than from the strength of its execution, the joints of the stones being worked exactly true, and put together without cement.

Palladio built some excellent bridges at Vicenza, and designed several others, with architectural decorations after the manner of the ancients, but has given a greater degree of lightness to the piers. He fixes the proportion from a fourth to a sixth of the opening of the arches, which some architects think too little. Independently of the different characters that bridges may have to present by means of their ornamental parts, their mathematical construction is a difficult and particular branch of study; and those architects have succeeded the best who have made it almost their exclusive study.

Of modern bridges, perhaps, the two finest are those of Westminster and Waterloo, over the Thames at London. See ARCHITECTURE, and note thereto.

Of other bridges in the British islands, the most ancient one in the Gothic style is the triangular bridge at Crowland, in Lincolnshire, which was erected A. D. 860. London bridge is an old Gothic structure, originally built with twenty small arches, each twenty feet wide; but there are now only eighteen open, two having been thrown into one in the centre, and another on one side is closed; it is nine hundred and forty-six feet long, and is condemned to destruction as soon as the new one, now building, is completed. The longest bridge in England is that over the Trent at Burton, built in the twelfth century, of squared freestone, containing thirty-four arches, and is one thousand four hundred and forty-five feet in length. But this falls short of the wooden bridge over the Drave, which, according to Dr. Brown, is at least five miles long.

One of the most singular bridges in all Europe is that built over the Taaf in Glamorganshire, by William Edward, a poor country mason, in the year 1756. This remarkable bridge consists of only one stupendous arch, which, though only eight feet broad, and thirty-five feet high, is no less than one hundred and forty feet span, being part of a circle of one hundred and seventy-five feet diameter.

In France, the construction of roads and bridges has been for a long time intrusted to a corps of civil engineers, for whose instruction a particular school has been instituted, which has justly acquired celebrity, especially since Péronnet and De Chezi had its direction. They may indeed be regarded as the founders of this school. These learned men introduced a new system into the construction of bridges, and have left many fine examples for imitation, in the bridges of Mantes, Melun, St. Maxence, Neuilly, and especially in that of the Pont de la Revolution, now de la Concord, which unites the Champs Elysees to the palace of the Legislative Body. The architect endeavoured in this bridge to render the piers as light, and the arches as extended and lofty as possible.

In the system of the ancients, the eye is in general less astonished, but the mind is more satisfied: and the repairs that time renders necessary are easy to be done. According to M. Legrand, the architects just mentioned have not given that character of strength and solidity to their bridges that the ancients did.

To build a bridge advantageously, the number and size of the piers should be regulated by the rapidity of the river, and by the velocity of its waters and inundations. The extent of the arches, their curve, and height, should equally have their proportional regulations. M. Legrand proposes as models the modern bridges before mentioned, which unite practice with a theory founded upon scientific calculations. He infers, from experience, that many advantages would arise from building the arches of a middling span and elevation, sufficient to diminish the weight of the voussoirs, without making at the same time a too great ascent for carriages. Necessary precautions should also be taken to preserve the arches from sudden or extraordinary increase of the waters; and it is absolutely necessary to provide, in building them, proper means of repairing the parts most exposed to destruction whenever requisite. The twenty-third plate of the *Recueil et Parallèle* of M. M. Durand and Legrand, before mentioned, presents several examples of different methods for this purpose, and exhibit various degrees of richness to which this kind of buildings may be brought. Among the other kind of bridges in modern use are triumphal, covered (such as the bridge of Schauffhausen in Switzerland), iron, &c.

Among the principal bridges not before mentioned, whose excellencies of construction or beauty of design are most worthy of attention, may be reckoned the *Pont St. Esprit*, over the Rhone, which has nineteen considerable arches, besides several small ones in one of the butments. The celebrated one at Rimini, which *Temanza*, a Venetian architect, who published an ac-

count of it, says, that all the voussoirs, and other stones of that fine work, have their faces that lay one to the other so exactly joined, that a hair could not pass between them. He also believes that there were particular artificers among the ancients, whose business it was thus to smooth the joints of the stones, and quotes the *Theodosian* code as mentioning such by the title of *quadratarii*. The *Ponte St. Angiolo* at Rome; the *Ponte Rialto* at Venice, which consists of one very flat and bold arch, nearly one hundred feet span, and only twenty-three feet high above the water. A bridge in the city of Munster, in Bothnia, much bolder than the Rialto. Kircher mentions a bridge in China three hundred and sixty perches long, without any arch, but supported by three hundred columns. In the Philosophical Transactions is the representation of a bridge in the same country, built from one mountain to another, consisting of a single arch four hundred cubits long, and five hundred cubits high, whence it is called the flying bridge.

Bridges (Iron). Iron bridges are the exclusive invention of British artists. The first that was erected is that over the Severn, at Colebrook Dale, in Shropshire, which is composed of five ribs, each of which has three concentric arcs connected by radiating pieces. The interior arc forms a simecircle, but the others extend only to the cills under the road way. Upon the tops of the ribs are laid cast iron plates, which support the road way. The arch of this bridge is one hundred feet in span: it was constructed in 1777, by Mr. Abraham Darby, iron master of Colebrook Dale. The second bridge of this material was designed by Thomas Paine, the political writer, and was constructed after his directions, by Messrs. Walker, at Rotherham, in Yorkshire, and brought to London. It was erected and exhibited for some time in a bowling-green at Pancras, near the old church. It was intended for America; but the materials were afterwards used in constructing the bridge at Wearmouth. This bridge which is thrown over the river Wear, at Bishops Wearmouth, in Sunderland, was projected by Rowland Burdon, Esq. M. P. It consists of one arch of two hundred and thirty-six feet span, being a segment of a circle of four hundred and forty-four feet diameter; the whole height from the low water is about one hundred feet, and will admit vessels of from two to three hundred tons burden to pass under without striking their masts. A series of one hundred and five blocks form a rib, and six of these ribs complete the width of the bridge, which is thirty-two feet. The spandrels are filled by cast iron circles, which touch the outer extremity of the arch, and support the road way, which is formed by a strong frame of timber, planked over and covered with a cement of tar and chalk, then layers of marl, limestone, and gravel. The abutments are masses of solid masonry, twenty-four feet in thickness, forty-two feet in breadth at bottom, and thirty-seven at top. There is a beautiful model of this bridge in the antiroom of the great room at the Society of Arts, &c. at the Adelphi.

Timber bridges, bridges of suspension, and the mathematical principles of constructing bridges of every sort, belong more to a work devoted to science, than to a dictionary of the fine arts. The student, therefore, is referred for such particulars to the article Bridge in the Encyclopædia Metropolitana, to which the present article is much indebted; to Dr. Brewster's Cyclopædia, and to that of Dr. Rees; to many of the books referred to in the article Architecture; and the list at the end of the article in the Encyclopædia first above referred to.

Bridle. [bꞃıꝺel, Saxon.] *In the archaiology of painting and sculpture.* The headstall, bit, and reins, by which a horse is governed. The origin of this invention is of the highest antiquity, and has been variously assigned. Pausanius attributes its invention to Minerva; Virgil (Georg. lib. iii. ver. 115.) and Pliny, to the Lapitha Pelethronius. Many of the coins struck in the ancient towns of Thessaly represent a horse, sometimes with a rider, but often running loose with a long rein trailing on the ground, to show that the bridle was the invention of the Thessalians. It has been used by all nations who employed horses in war or otherwise, and many representations of it are found in antique sculpture. An entire work has been published by M. Invenizi, called *De Frænis;* Rome, 1785, in 8vo.

Bright. [beoꞃt, Saxon.] *In painting.* Lucid, glittering, full of light. A picture is said to be bright when the lights so much prevail as to overcome the shadows, and kept so clear and distinct as to produce a brilliant appearance.

Brilliant. [*brillant*, Fr.] Shining, sparkling. This word is variously applied; as a *brilliant tone*, a *brilliant light*, *brilliant colouring*, &c., and signifies that clear bright imitation of nature in various objects, which is the effect of much study and practice.

Brocatelli. See Marble.

Broker. See Picture Dealer.

Bronze. [*bronzo*, Ital. *bronze*, Fr.] *In sculpture and architecture.* A compound metal, consisting chiefly of copper, with a small proportion of tin, and sometimes of brass, or other metals. Statues and other works of art, cast in this metal, are called bronzes.

Bronze is one of the most ancient, as well as one of the best materials in which sculptors cast their figures; for, besides possessing the advantage of being less subject to rust or corrosion by exposure to the air than other metallic compounds, it acquires a fine dark green colour from the oxyde formed upon it, which is much admired. The ancients used this compound metal for many purposes for which iron and steel are now used, as instruments, swords, springs, and nails.

Many fine specimens of bronzes, such as statues, penates, vessels remarkable for their size and elegance, fine large candelabra, miscellaneous articles, ancient armour consisting of helmets, breastplates, standards, swords, belts, heads of spears, points of arrows, steelyards, scales, knives, pateræ, simpula, mirrors, caps, bells, mortars; measures and wine strainers; large vessels for culinary and other purposes, several small candelabra, an entire lectisternium, fragments of lectisternia, armillæ, chains, bits, spurs, and ornaments for harness; buckles, fibulæ, specimens of locks and keys, handles and other parts of vases, &c., are in the magnificent collection of antiquities in the British Museum. Philo, of Byzantium, asserts, that the broad spring plates of the catapulta, for throwing darts, was formed of bronze, whose component parts were copper, alloyed with tin. The art of casting in bronze was not unknown to the Greeks or Egyptians; but the only remains we have of the latter are very small specimens, such as the idols in the eighth, or Egyptian room of the department of antiquities in the British Museum. It appears that the ancients did not possess the art of founding very large pieces of bronze sculpture, but cast them in small pieces, and joined them afterwards. Indeed, this art is of late date or recovery. The statues of Marcus Aurelius at Rome, of Cosmo di Medicis at Florence, and of Henry IV. at Paris, were thus made. The equestrian statue of Louis XIV. in the Place de Vendome at Paris, is one of the largest pieces of bronze sculpture ever made. This colossal group contains a weight of upwards of sixty thousand pounds weight of bronze, and was formed in one cast, and without a joint. The operation of casting large works in bronze is a work of considerable difficulty, and requires much scientific knowledge and great practice. Various artists have different modes for conducting this operation, which are too numerous for this work, and more properly belong to metallurgy or chemistry. Macquer's instructions are, however, sufficiently brief and simple. He directs a brick furnace to be erected, nearly in the shape of a baker's oven. The floor of this oven is concave, and consists of a composition of sand and clay. In the hollow floor the metals are placed. The furnace has four openings. The first has a lateral mouth, at which the flame of the fuel enters, which is placed in a second furnace on one side of the first. The second opening is a chimney placed on the side opposite the mouth, by means of which the flame is drawn over the metal. The third opening is a hole, which can be opened or shut at pleasure, to inspect the state of the inside of the furnace and its contents. When the metal is in the state required, a fourth aperture is opened, communicating with the hollow floor, through which the metal flows by channels into the moulds prepared to receive it. These moulds are made on the model of the figure intended to be cast, with a mixture of one part of plaster of Paris and two parts of brick dust. The mould is then to be taken from the figure, and lined on the inside with a thin layer of clay, the thickness the bronze is intended to be; the mould is then to be put together, and the cavity within the clay filled with a similar composition to the mould which forms the core, which, if large, must be previously supported by bars of iron. When this is done, the mould is to be taken off, the clay thoroughly cleaned out, and the mould and ore completely dried; the mould is then to be placed thereon, and the vacuity formed by the removal of the clay is the channel for the metal, in a state of fusion, which must be properly conducted to it, and care taken that proper vents are left in the mould for the expansion of the air by the heat of the metal.

Brown. [brun, Saxon.] *In painting.* A dusky colour, inclining to redness. The word indicating something that has been burned. Of this colour there are various shades or degrees, distinguished by different appellations, as Spanish brown, umbers, London brown, various burnt earths, &c.

Brush. See Pencil.

BUCENTAUR. [Βουκένταυρος of βοῦς a particle augmentive, and κένταυρος a centaur, or βοῦς a bull, or, and κένταυρος a centaur.] *In painting.* An ideal monster, half a man and half a bull. (See CENTAUR.) Also the stately galley in which the doge and senate of Venice go annually in triumph to espouse the sea, by dropping a ring into it, with the following words, "Desponsamus te, mare, in signum veri perpetuique dominii."

BUCKLER. See SHIELD.

BUFFET. [Fr. from bȣȣ̈, Saxon, a service or course of dishes, and ꝑæt, Saxon, a receptacle.] *In architecture.* A kind of cupboard, in which are placed the ornaments and utensils of the dinner table.

BUILD (To). [býlȣan, Saxon.] *In architecture.* To confirm, establish, make firm, sure, and fast. According to the strict meaning of this word, huts, hovels, and other weak and fragile buildings are merely raised; but confirmed, established, and permanent structures are built. See ARCHITECTURE.

BUILDER. See ARCHITECT.

BULL. [*boll*, Ger. from bellan, Saxon.] *In painting and sculpture.* The male of black cattle. This animal was the most frequently used in the sacrifices of the ancients, particularly to Jupiter, Mars, Apollo, Minerva, Juno, Venus, and Ceres. They mostly chose a black bull for Neptune, Pluto, and the infernal deities. This animal has often been the subject of the artist's pencil and chisel. There are two very fine ones represented as being sacrificed by two victories, in the department of antiquities of the British Museum. At Constantinople was formerly a very fine bull in bronze, which was said to have been the celebrated bull of Phalaris; and in which the martyr Antipas was burned.

BULLA. [Lat. βέλη, Gr.] *In ancient costume.* Small golden ornaments, formed like a heart, at first worn only by the children of persons of the highest rank till they were fourteen years of age, and then hung up and dedicated to the household gods (Pers. v. 30). This amulet was borrowed by the Romans from the Etruscans (Juv. v. 164.); and was imported by Tullus Hostilius (Macrob. Sat. i. 6). One of great antiquity is preserved in the British Museum. For some learned discussions on this ornament see PLUTARCH in Romulo; BAYFIUS de re Vestiariâ; the first volume of WHITTAKER'S *History of Manchester* (p. 79.), on some *bullæ* dug up at Manchester; in AUGUSTIN, *apud Grævii Thesaurum Antiquitatum Romanorum*, xi.; and in SPON, *Miscell.* Erud. Act. § 9. See ABOLLA.

BULL'S EYE. *In architecture.* A small circle or elliptical window.

BUSKIN. See SANDAL.

BUST or BUSTO. [*busto*, Ital. *buste*, Fr.] *In sculpture.* A piece of sculpture representing only the head, breast, and shoulders of a human being. Though this word has been applied to painting, yet, on the authority of Felibien, and other eminent critics, it is best to confine it to sculpture. This branch of sculpture is one of the most ancient modes of representing the human species in art. Busts were in common use both among the Greeks and Romans, and were employed sometimes to ornament their votive bucklers; and, at others, to show the portraits of their illustrious ancestors, which was a custom allowed only to those families whose ancestors had most distinguished themselves, and had arrived at the first magistracy in the republic, and which they called *imagines majorum.*

The manner of executing portraits in relief or busto is the same as the other branches of sculpture. (See SCULPTURE.) The ancients often formed their busts of two or more materials, incrusting the eyes with precious stones or valuable metals, as are seen in some of the antiquities of Herculaneum, and some busts of very early workmanship in the department of antiquities of the British Museum. The ancients, it should seem, were acquainted with the manner of taking masks from the face for the purpose of making busts. And according to Pliny, Lysistratus of Sycion, the brother of Lysippus, was the inventor of this art. Busts are of the same materials as statues, being made of bronze, marble, plaster of Paris, terra cotta, &c. They are peculiarly valuable for conveying to posterity the features of great men: and their authenticity is discoverable either by the inscription or resemblance to the portraits on medals, coins, &c. The most valuable now in existence are two colossal heads of Minerva sospita; a similar one of Hercules, dug up at the foot of Mount Vesuvius, and another of the same god, of very early Greek sculpture; one of Jupiter Serapis, of which the paint is still perceptible; busts of Heraclites, of Zeno, Pericles, Epicurus, Aspasia, Periander, two of Homer, Trajan, Gordianus, Africanus, Marcus Aurelius, Pontifex Maximus, Lucius Verus, Nero, Hadrian, Caracalla, Aratus, Plautilla, two of Adonis, Sabina, Messalina, &c. in the British Museum; one of Hiero, king of Syracuse, another of Alcibiades, and other very fine ones, in the museum Pio Clementino.

Some busts of Tragedy, Comedy, Euripides, Homer, the Indian Bacchus, Socrates, Hippocrates, &c. formerly in the Napoleon Museum at Paris; but now restored to their rightful owners. See SCULPTURE.

BUTMENT. See ABUTMENT.

BUTTERFLY. [butterflege, Saxon.] *In archaiology.* An insect. Among the ancients the butterfly was a symbol of the soul; the same Greek word Ψυχή, signifying both a butterfly and the soul. Cupid fondling or holding a butterfly over a torch is the same as his caressing Psyche or the soul. On one antique Cupid is drawn in a triumphal car by two Psyches, and in another by two butterflies. On a fine bassi rilievi at Rome is the representation of a young man stretched on a bed, and a butterfly issuing from his mouth; emblematical of the departure of the soul from the body. For the beforementioned reason Psyche is always represented with the wings of a butterfly. Montfaucon, in his Antiquité Expliquée, has given several plates and explanations of antiques of this description, particularly plate 74, vol. 5, part II. and plate 120, vol. 1, part I.

BUTTRESS. *In architecture.* A prop, or any thing to support another. They are used as ornaments in Gothic and old English architecture, against the angles of steeples, churches, and other buildings; against walls to support them from the thrust of heavy roofs, arches, &c. See ABUTMENT.

C.

CABINET. [Fr. *the diminutive of cabin.*] *In architecture.* A small apartment in a palace or mansion, usually set apart for the private use of the owner. Its use is nearly the same as the boudoir (see BOUDOIR), and has given its name to small highly finished pictures that are well adapted for furniture, to the elegance of this apartment. The ancients as well as the moderns had several kinds of cabinets; as the *cubiculum*, a small apartment or study; the *tablinum*, which is synonymous with the cabinet; the *pinacotheca*, which was the picture room or gallery. Vitruvius directs that it should be spacious, and turned towards the north, that the light may be equal.

CABLES or CABLED. [κάμηλος, Gr.] *In architecture.* Wreathed circular mouldings resembling a cable rope; also the staff or cable which is left in the lower part of the flutings of some examples of the Corinthian and Composite orders.

CADUCEUS. [Lat.] *In archaiology.* The golden rod or wand assigned by the mythologists to Mercury. It was represented by the Egyptians like two serpents knit together in the middle. This wand was given him by Apollo in return for surrendering the honour of inventing the lyre. The caduceus afforded him the power of bringing souls out of hell, and also to cast any one into sleep (see Homer's Hymn to Mercury, v. 526). It is sometimes represented with wings; and Mercury is thus equipped by Virgil when he is sent to Æneas by Jupiter, Æn. iv. v. 257; and by Statius, in his Thebaiad, i. v. 311; and also in the Vatican manuscript. The caduceus is also used on antique coins and medals as the emblem of commerce. See ATTRIBUTES.

CÆLIUS (Mons.) *In the history of architecture.* One of the seven hills of Rome, originally called *Querquetulanus*, from the numerous oaks which grew upon it. Its second name was derived from Cælius Vibenna, whom Tacitus (ann. iv. 63), makes an Etruscan ally of the elder Tarquin. The church of *S. Stefano in Rotondo*, one of the most ancient churches in Rome, is situated on the Cælian mount.

CAISSON. [Fr.] *In architecture.* A kind of chest or flat-bottomed boat in which brick or stone work is built; then sunk to the bottom of the river for forming the foundations. Some of the caissons which were used by Labelye for the erection of Westminster Bridge contained above one hundred and fifty load of fir timber, of forty cubic feet to the load, and was of more tonnage or capacity than a forty gun ship of war. (See BRIDGE). *Hutton's Principles of Bridges.*

CALATHUS. [Lat. Κάλαθος, Gr.] *In ancient architecture.* A sort of basket in which women anciently kept their work; and also a sort of cup used in sacrifices. The baskets which are on the heads of canephoræ are also called by this name, as well as the baskets on the heads of Jupiter Serapis, Juno of Samos, Diana of Ephesus, &c. See VITRUVIUS.

CALCOGRAPHY. [from Κάγκὸς, *brass*, and γράφω, *I engrave.*] The art of engraving. See ENGRAVING.

CALDARIUM. See LACONICUM and STOVE.

CALIDUCTS. (from *caleo* and *ductus.*] *In architecture.* Pipes or canals disposed in or along the walls of houses, for convey-

ing hot air or steam to distant apartments, from a common or central furnace, after the manner of the ancients. This method has been adopted in modern buildings with much success and economy. Several modes, descriptions, and models for this purpose may be seen in the repository of the Society for the Encouragement of Arts, &c. in the Adelphi. The inquiring reader is also referred to TREDGOLD's Treatise on the Ventilation of Buildings, and a work by Mr. SYLVESTER of Derby, on the same subject.

CALLIMACHUS, of Corinth. *In the history of architecture.* A Grecian architect who flourished about 540 years before Christ. He was the inventor of the Corinthian order, which is said to have originated by his seeing the leaves of an acanthus gracefully spreading over the basket upon a lady's tomb. See CORINTHIAN CAPITAL, *Moreri, Pliny.*

CALVARIES. [from Calvary, the death-place of Christ.] *In architecture.* The names of certain chapels in Catholic countries, wherein are represented the mysteries of Christ's passion and death. They are generally built upon a hill, the better to imitate the place. Devotion has multiplied these kind of chapels in Italy and some parts of France.

CALYX. [Lat. Κάλυξ, Gr.] *In architecture and sculpture.* The cup of a flower, or the small green leaves on the top of the stalk in plants. Also sculptural representations of the same parts of the leaves of various ornamental foliage. See CAPITAL, CORINTHIAN.

CAMAYEU. See MONOCHROME.

CAMEA. See CAMEO.

CAMEL. [Κάμηλος, Gr. *Camelus*, Lat.] *In the archaiology of the arts.* An animal or beast of burden very common in Arabia, India, and the neighbouring countries. The camel is often found represented on ancient medals, and is the symbol of Arabia. On an ancient splendid vase of gold, which is in the Royal Collection at Paris, is a representation of Silenus mounted on a camel: and on an ancient bassi rilievi, representing the triumph of Bacchus, the Indian kings are seated on camels. This animal is also much introduced in pictures from sacred history.

CAMEO. [*cammeo*, Ital. or from *camma*, Arab, an amulet.] *In gem sculpture.* A cameo is generally understood to be a precious stone carved in relief, but is more particularly used for those stones of differently coloured laminæ. These laminæ are left or removed with much art, for the head, the beard, the hair, and other colours of a bust. Some antique cameos have four layers, as the fine one of the apotheosis of Augustus, and that of Germanicus in the Royal Library at Paris; one of the same subject as the first mentioned, and another of Rome and Augustus, in the cabinet at Vienna. See GEM SCULPTURE.

CAMERA OBSCURA [Lat.] or dark chamber. *In painting.* An optical machine or apparatus wherein the images of external objects are represented in their proper colours. It is used to delineate objects with accuracy, and is useful to the painter of artificial effects of the weather.

CAMERA LUCIDA [Lat.] or light chamber. *In painting.* An optical instrument which, by means of lenses, a stile, &c. gives the outline of external objects on the paper or canvass with much clearness and accuracy, so that the artists can sketch the subject without his hand moving in a dark box like the camera obscura. It is the invention of the learned and scientific Dr. Wollaston.

CAMPANILE. [Lat.] *In architecture.* A clock or bell tower. This word is now adopted into the English language, and is applied to such erections as the two western towers of St. Paul's cathedral, London, St. Peter's at Rome, &c. and to detached buildings in some parts of Italy, erected for the purpose of containing bells. The most celebrated are the campaniles of Cremona, Florence, and Pisa. From their great height and the smallness of their bases, several of them have much deviated from their original perpendicularity. Those at Ravenna, Pisa, Padua, Mantua, and Bolonga are particularly so.

CANARA. See ARCHITECTURE, INDIAN.

CANDELABRUM. [Lat. from *candela* and λαβεῖν.] A high and ornamental candlestick. Among the ancients candelabra were more used as stands for lamps than in their modern acceptation. They are generally divided into three parts, the pedestal, the fust or shaft, and the bell or vase which holds the light. The form of candelabra are various, and susceptible of great decoration, and among the ancients were exquisitely beautiful in form, and splendid in sculptural embellishments. They sometimes represented the trunk of a tree, sometimes a decorated column, and every varied form that artists could invent. In the earliest periods of Grecian history the candelabrum was a subject of grandeur and elegance. Homer in his Odyssey, describing the palace of Alcinous, King of Corcyra, speaks of candelabra of solid gold, in the form of youths, placed

on pedestals in the shape of altars, holding lights in their hands. Cicero also mentions one that was ornamented with precious stones, and was intended for the temple of Jupiter Capitolinus. The forms of antique candelabra may be collected from the examples left on various bassi rilievi, and actual specimens. On some coins of Septimius Severus, and of his sons, are several representations of candelabra; and in a painting at Herculaneum, are two in the form of doves. There are also two under the portico of the Pantheon at Rome; and several, beautifully sculptured, in the collection of antiquities in the British Museum, and a very splendid one in the Radcliffe library at Oxford.

CANEPHORÆ. [*κανηφόρος*, Gr.] *In sculpture.* The young and noble females who carried baskets of flowers on their heads at the festivals of Minerva (see OVID, *Met.* 2); also statues representing them. Canephoræ have been sometimes erroneously called caryatides, as in the synopsis of the antiquities contained in the British Museum, where the fine canephoræ in Room 2 is called a caryatide, which may have arisen from the false application of one for the other, by modern architects. Canephoræ are only properly used by the side of an altar, and were never applied by the Greeks in this manner to columns; a more modern architect has applied some fine antique canephoræ in the Villa Albani, to support a cornice in the manner of caryatides (see CARYATIDES). It is supposed that these are copies of the celebrated ones of Polycletes. Messrs. INWOOD's have also used them in the wings of their handsome church of St. Pancras in the New Road, London.

CANON. [Lat. *κανὼν*, Gr.] *In all the arts.* A rule, law, or constitution. A canon is one of those works of art whose merits are received and style adopted as guides for students; such as most of the celebrated antique statues, works of the best masters in painting, elegant buildings, &c. According to Pliny, ancient artists distinguished by this name, the celebrated Doryphorus (a statue of the spearmen who attended the Grecian kings) of Polycletes, because they regarded it as a model of perfection in art; and, according to Cicero, Lisippus perpetually kept it before him as a study.

CANOPUM. *In architecture.* A temple to the Egyptian god Canopus, which from the story related by Suidas, represented the element water. There was a building of this name in the Villa Hadriani at Tivoli.

CANOPY. *κανωπεῖον*, Gr. *conopeum*, Lat.] *In architecture.* An ornamental covering over head; mostly applied to the covering which is extended over thrones and seats of state, altars, &c.

CANVAS. [*cannabis*, Lat. from *κάνναβις*, hemp.] *In painting.* A sort of coarse linen cloth used by painters for their pictures. See PAINTING.

CAPITAL. [*capitalis*, Lat. *capitello*, Ital.] *In architecture.* An ornament on the top of a column. Capitals to columns are of early invention, and are as useful as they are ornamental. They embellish the upper part of the column, and prevent its angles from being fractured or from damaging the architrave. In the earliest times columns were used without capitals, and a short time afterwards with only an abacus, as in some Egyptian specimens, particularly in the ruins of Thebes. This afterwards was improved to a sort of a bell formed capital, at first plain, and afterwards sculptured with hieroglyphic figures, foliage, &c. The fruit or flowers of the lotus probably gave rise to the bell formed capital, which was afterwards embellished with palm leaves, as in some examples found at Esne. In some temples at Amara, and in the island of Philæ, the capitals are formed of the head of Isis. Variety of other capitals, more or less ornamented, are to be found in the works of Dr. POCOCK, Capt. NORDEN, and Mons. DENON. See ARCHITECTURE EGYPTIAN.

The capitals used in Persian architecture are of three kinds, one of which is nearly half the height of the shaft of the column, and resembles a plume of feathers which falls down all round, in the middle of which rises another plume, and from thence an unknown ornament. The others are composed of the anterior moieties of the fabulous unicorn, in the manner of the heads of Janus of the Romans, Capitals of this kind are found in the royal tombs at Persepolis, near the palace; examples may also be found in the works of NIEBUHR and CHARDIN.

The capitals of the temple or pagoda, in the island of Elephanta, are like broad and flat cushions, somewhat compressed, consisting of a double echinus, one turned to the other and separated by a fillet.

In the architecture of the Greeks and Romans, the following are the usual divisions of the capitals. See also ORDER.

TUSCAN. According to Vitruvius, the height of the Tuscan capital from the astragal at the bottom, must be half the diameter of the body of the column below. And this height being divided into three

parts, the first and uppermost part goes to the abacus, the second part goes to the echinus and fillet under it, and this part is subdivided into four parts, of which three go to the echinus, and one to the fillet; the third and last part is divided into two parts, one of which is the breadth of the astragal under it, which consists of a semicircle, and a fillet under it. The astragal again is divided into three parts, of which two are given to the semicircle, and one to the fillet. The projecture of the capital to be one eighth part of the diameter of the body of the column below. The astragal projected from a square. According to Scammozzi, the height of the capital, from the astragal at the bottom, must also be one half the diameter of the column below. And this height being divided into sixty parts, twenty of them are to go to the abacus or plinth, as he calls it, fifteen to the echinus, which Vitruvius calls the boulter, five to the roundel or bead moulding, which is a semicircle, three to the listella, which Vitruvius calls a fillet, and seventeen to the neck or frieze. Again, seven such parts must go to the ovolo of the astragal, and three to its listella. According to Palladio, the height of the capital is half the diameter of the body of the column below, viz. at the astragal, which none of them reckon a part of the capital, though in propriety it ought to be so esteemed; and this height is divided into three equal parts, the uppermost of which goes to the abacus, which he calls the dado or dye; the next part goes to the ovolo or echinus; the rest is divided into seven, of which one is for the listella under the ovolo, and the other six parts go to the collarino or neck; he also calls it the hypotrachelium or frieze of the capital. The best examples are, the church of St. Paul, Covent Garden, which is the true Vitruvian Tuscan; the descriptions and designs of Palladio, Scammozzi, Sir William Chambers, &c. This order is well adapted to market places, &c. as the simplicity of the parts and the extraordinary projecture of the cornice renders it suitable to that purpose.

Doric. According to Vitruvius, the height of the Doric capital from the astragal at the bottom is equal to half the diameter of the body of the column below. And this height being divided into three parts, the first and lowermost goes to the neck, the next part goes to the echinus, by which term he here comprehends several members; he describes this part in two forms, one of which is an echinus and three fillets under it: the other an ovolo, and an astragal under it, and this portion is divided into three parts, two of which go to the echinus, and the other to the three fillets or to the astragal, and the fillets are all of an equal size. In the astragal the fillet is one third of the whole; the third and uppermost part of the capital is again divided into three, the two lowermost of which go to the square, and the other to the cimatium, which is an ogee with the hollow downwards, and a fillet over it. An ogee or cima recta is a moulding, somewhat resembling an S, which Vitruvius makes of two quarter circles joined together, and this cimatium being also divided into three parts, two of them go to the ogee and one to the fillet; the astragal under the capital is equal to half the neck.

Scammozzi makes the capital of the same height, which he divides into sixty parts, of which three go to the fillet of the cimatium, five to the ogee of the cimatium, twelve to the square, fourteen to the boulter, five to the rondel, two to the fillet of the astragal under the boulter, and nineteen to the neck. The astragal contains ten such parts, of which six and a half go to the rondel, and three and a half to the fillet.

Palladio also makes the capital of the same height with Vitruvius, which he divides into three parts; the uppermost of which he subdivides into five parts, two of which go to the cimatium, and is again subdivided into three parts, one of which goes to the listella or annulet, and the other two to the cima recta. The other three of the first subdivisions of this part, go to the abacus; the second of the three grand divisions of the capital is subdivided into three parts, two of which go to the avolo or echinus, and the other to the annulets under it, which are three and are equal; the third principal part goes to the hypotrachelium or frieze. The astragal under the neck is as high as all the annulets.

In every Grecian Doric order the abacus of the capital is always plain, being a solid parallelopipedon; of which its two horizontal sides are equal squares, and its vertical or perpendicular sides are equal rectangles; the inward recesses of the annulets in the capital are in the same curve line as the ovolo above them (the Doric portico at Athens excepted); and their outward extremities are equal to their inward recesses. The best examples of this noble order are, the remains of the Greek temples at Thoricus, Corinth, the temple of Apollo at Delos, the temples of Theseus, the Parthenon, the Propylea, the Doric portico at Athens, the temple of

Minerva on the Sunium Promontory, the temple of Jupiter Nemeus, between Argos and Corinth, the temple of Selinus, and those of Juno and of Concord at Agrigentum, that of Jupiter Panhellenius in the island of Egina, and those at Pœstum. See STUART's *Antiquities of Athens*. LE ROY, *Ruines des plus beaux Monumens de la Grece*, fol. Paris, 1758. MAJOR's *Ruins of Pæstum*, fol. Lond. 1768. WILKINS's *Magna Grecia*, and other works mentioned in the article ARCHITECTURE.

IONIC. According to Vitruvius, the Ionic capital is formed thus; divide the semidiameter of the body of the column below into eighteen parts; take nineteen parts, of which three must go for the cimatium, one to the fillet, and two to the cima or ogee under it. Then take four parts for the trochilus of the volute or scroll (the trochilus is that member from whence the scroll begins); then take four parts for the boulter, which is one fourth of a circle, and is to be carved with eggs and anchors. Then take two parts for the astragal under the boulter. The astragal is carved with beads, and has a fillet on each side of it; each one fourth of the whole. The six remaining parts must go to the half of the volute below; then take eight more such parts, which must go to make the remainder of the frieze or neck of the capital, and three more such parts for the astragal, under the neck on which one part goes to the fillet. Scammozzi's description of the Ionic is not worth transcribing; and Palladio's description agrees with that of Vitruvius; the best examples are the capitals of the columns of the temple near the Ilyssus, those of Bacchus at Teos, Minerva Polias at Pryene, and Minerva Polias at Athens, Apollo Dydæmæus near Miletus, of Erectheus, Fortuna Virilis at Rome, &c. of which there are many fine fragments in the British Museum. See STUART's *Antiquities, and the Ionic Antiquities, published by the Dilettanti Society*, Lond. 1769—97.

CORINTHIAN. According to Vitruvius, the height of this capital from the astragal at the bottom, is equal to the diameter of the body of the column below, one seventh part of which goes to the abacus, which consists of an ovolo, a fillet, and a cavetto. The abacus being subdivided into three parts, one of them goes to the ovolo, and a third part of the next goes to the fillet, and the rest to the cavetto. The height of the astragal below the capital is one twelfth part of the diameter of the body of the column below, and is divided into three parts, whereof the fillet contains one part, and the boulter two. Scammozzi makes this capital one diameter and one sixth of the column high, which divided into seventy-five parts, four of them go to the boulter, one to the fillet, nine to the plinth, and the rest to the neck. Palladio also makes the height of the capital equal to the whole diameter of the body of the column below, and one sixth part more, which is allowed for the abacus, by which I understand he meant all the mouldings above the acanthus leaves.

The best examples of this order are, the tower of Adronicus Cyrrhestes at Athens; the portico called Pœkile, the Choragic Monument of Lysicrates at Athens, built in the time of Alexander the Great, the portico of the Pantheon at Rome, the temple of Antoninus and Faustina, the porticoes of Octavius and Septimius Severus, the arch of Constantine, the temples of Jupiter Stator and Jupiter Tonans, the baths of Dioclesian, &c.

ROMAN OR COMPOSITE. Vitruvius divides this capital like the Corinthian, and so does Scammozzi and Palladio, only the carving of it is somewhat different, and is so little used that it is not worth describing (see ARCHITECTURE ORDER). See STUART, PIRANESI, LE ROY, DESGODETZ, VASI, &c. on the Antiquities of Greece and Rome.

CAPITOL. *In archaiology*. The temple of Jupiter Capitolinus at Rome, built on the Tarpeian Mount, in consequence of a vow made by Tarquinius Priscus, in the Sabine war (Liv. lib. i. c. 55). Also several other edifices in the Roman empire, where the magistrates assembled. And, in imitation, the Roman colonies had each their capitol. The most celebrated edifices of this description, were those of Constantinople, Jerusalem, Carthage, Milan, Ravenna, Verona, Augsburg, Treves, Cologne, Rheims, and Thoulouse (Alex. ab. Alex. vi. 11; and Hoffman, Lexicon ad vocem). The Capitol at Rome was enriched by Sylla, with Grecian columns, brought from the temple of Jupiter Olympius at Athens (Liv. lib. 35. 38. PLIN. lib. 35). It was burnt in the time of Vitellius, and rebuilt by Vespasian; was again burnt about the time of his death, and rebuilt a third time with magnificence and splendour by Domitian, in which the expenses of the gilding amounted to twelve thousand talents (PLUTARCH in Poplicola). The present Capitol or the Campidoglio, is worthy of notice for its splendour; and its design is attributed to Michael Angiolo Buonarotti, during the pontificate of Paul III. On the sides of the grand approach are the colossal statues of Castor and Pollux, each holding a horse by the bridle, and in the centre of the court is a fine

equestrian statue of Marcus Aurelius, and many other beautiful antiquities of ancient Rome. It is in the wings of this building that the museum called the Museum Capitolinum is kept. Among the treasures of art preserved in this Museum, are the *Capitoline marbles* or *Fasti consulares* which were dug up in the Forum, not far from the church of Sta Maria Liberatrice, in the year 1445. They were found in several fragments, of which one was excavated so recently as 1819. They contain a list of the consuls and all public officers from Romulus to the year U. C. 724.

In the ancient capitol the most important public documents were preserved. Polybius (iii.) mentions it as the depository of the treaties between the Romans and the Carthaginians; and Livy, that with the Latins, the Ætolians, Antiochus and Attalus. Here also are placed the Senatus Consulta and Plebiscita. Here the most solemn thanksgivings, sacrifices, and vows were offered; and hither was directed the march of triumphal processions.

Capitolinus (Mons). *In the history of architecture.* One of the seven hills of Rome, anciently called *Saturnius* as the residence of Saturn, and *Tarpeius* from the maid who betrayed it to the Sabines. It is believed to have been first enclosed when Romulus admitted Titus Tatius into the partnership of his throne; and then to have been decorated with a temple of Jupiter Feretrius. The thatched cottage of their first king, which crowned the Capitoline Mount, was long an object of veneration to the Romans. It is mentioned by Vitruvius in the reign of Augustus, and still later by Lactantius and Macrobius in the fourth century. See Burton's *Description of the Antiquities and other Curiosities of Rome.*

Car. [*karr*, Germ. *carrus*, Lat.] *In archaiology.* A sort of carriage drawn by beasts of burden; a war chariot. Cæsar is supposed to have introduced this word from the German into the Latin language during his war in Germany. In different ancient examples, cars are represented either with two or four wheels, drawn by different animals; as horses, mules, elephants, lions, panthers, &c. The invention of cars is attributed by some to Erichthonius, King of Athens, whose distorted legs prevented his walking; by others to Triptolemus, or Trochilus. The Athenians dedicated them to Pallas. Hesychius relates, that Neptune taught the inhabitants of Barca the use of cars. The coursing cars or chariots were also used in public festivities and games; these were in the form of a shell mounted upon two wheels, higher before than behind, and ornamented with painting and sculpture. When they were drawn by two horses, they were called *bigæ*, when with three *trigæ*, and *quadrigæ* when they were drawn by four horses, which were always abreast. Upon some Roman gems, cars are engraved drawn by twenty horses; but this most probably was a fancy of the artist.

The covered cars (*currus arcuati*), which were in use among the Romans, differed from the others only by having an arched covering above, which sheltered those in the car from the wind and bad weather. Some of the eastern nations used, in their wars, cars armed with scythes and other cutting instruments on the wheels; they were drawn by strong horses, and made dreadful havoc in the army of their enemies. It is hardly possible to determinate the period when cars were first invented; but their use in war is more ancient than that of cavalry. The heroes of Homer did not fight on horseback, but in chariots, from which they alighted to attack their adversaries. The chariots used in coursing were the same as those used in war. The Greek vases present a multitude of examples of both, of every form, and decorated with more or less elegance. Montfaucon, Willeman, and Roccheggiani, have given different examples of chariots in their works upon costume. When the art of war became improved, these cars became not only useless, but even dangerous to those who used them.

The cars of the different divinities are drawn by those animals which are sacred to each, as that of Mercury by rams, of Minerva by owls, that of Venus by swans or doves, that of Apollo by griffins, of Juno by peacocks, and that of Diana by stags. There is the extremity of a beam of an ancient car in the Cabinet of Antiquities at Paris; it is a fine head of Medusa, which was considered as a kind of amulet, to protect them from injuries, and to insure them victory. The public places and temples of Greece were ornamented with a vast number of cars in bronze, which, in consequence of victories, were collected in public places.

The Romans adopted them to perpetuate the remembrance of victories; bronze cars ornamented their triumphal arches, which were often surmounted with them. These triumphal cars were executed in marble. One is preserved in the museum of the Vatican at Rome. The use of triumphal cars was introduced, according to some, by Romulus, and others by Tarquin the elder, or Valerius Poplicola. Before the time of the emperors, they were in general gilt,

and of a round form; the victor held the reins himself, and when he had young children, they were placed beside him; or if youths, they accompanied the car on horseback. A great number of imperial medals represent the victor in his chariot.

The term *car* was also applied to certain long carriages mounted upon four wheels, which were sometimes covered with allegorical paintings, and filled with people disguised, and led in particular ceremonies or public fêtes, under the name of the car of victory, of war, the car of industry, or of peace, &c. They were in general drawn by six or eight horses magnificently caparisoned. Examples of these sort of cars may be found in all the works that give representations of antique fêtes, ceremonies, or public entries; they may also be seen in the prints which accompany the poems, to which Petrarch has given the name of Triumph of Love, the Triumph of Death, &c.

CARAVANSARY, or CARAVANSERA. [Turkish and Persian.] *In architecture.* A large house or public building erected for the reception of travellers. These buildings are seldom more than one story high, and are usually of a quadrangular form, with porticos in the interior for the horses and camels; chambers for the merchants and travellers, and warehouses for the merchandise. See *Voyages de* CHARDIN (ii. 142); MORIER'S *Journey through Persia*, p. 131.

CARCERES. See CIRCUS.

CARCHESIUM. [Lat. Καρχήσιον, Gr.] *In ancient architecture.* A machine described by Vitruvius, as used to raise stones and timber for building; a sort of crane.

CARDENES. See LOBBY.

CARICATURE. [*caricatura*, Ital. from *caricare*, to charge, to load, *caricature*, Fr.] *In painting.* The exaggeration of blemishes, and concealment of real beauty; a distorted resemblance of a person. This word is also sometimes applied, though improperly, to comic painting. Although some critics have been very severe on the practice of caricaturing, yet this practice is not unimproving to the artist, particularly the portrait painter, by accustoming him to discover and arrange the peculiarities by which the character of separate faces are determined. It was practised by the ancients, as well as by many eminent modern artists; there are several on the walls of Herculaneum, one of which in particular, represented Æneas, Anchises, and Ascanius, with the heads of hogs and an ape. Leonardo da Vinci practised this branch of art, and Count Caylus has published a collection of them in fifty-eight plates, entitled, "*Recueil des Têtes de Caractères et des Charges, d'après les dessins de* LEONARD DA VINCI." Annibale Caracci, although one of the first masters in serious paintings, yet occasionally practised caricature; and Raffaelle made one, of the celebrated Laocoon, representing the figures as apes. Among more modern artists, Pierre Leon Ghezzi, who died in 1755, is celebrated for caricatures of a striking character; the title of one of his works is, "*Racolta di* XXIV. *Caricatures designate colla penna del celebre, Cav. P. L. Ghezzi, conservate nel gabinetto, di S. M. il Re di Polonia.* Presd. 1750, fol. and Dotsd. 1766, fol." Our countrymen have long been celebrated for indulging the satirical vein in painting, and multitudes of caricatures are daily making their appearance on public men and manners. If Hogarth is excepted as a painter of a higher class, no one has excelled Gillray in this branch of art. The two Cruikshanks at present are at the head of this department, and have often approached the best of Gillray's works.

Captain Grose has left some amusing rules for drawing caricatures, to which the reader is referred for further information.

CARNATION. [from *caro*, *carnis*, flesh, *carnardino*, Ital. flesh colour.] *In painting.* Those parts of a picture which represent the flesh, or are naked without drapery. Titian, Coreggio, Rubens, and Vandyke, peculiarly excelled in this branch of art. See PAINTING.

CAROON BELED. *In the history of architecture.* An extensive mass of ruins, near the margin of the lake of that name, supposed to be the remains of the ancient labyrinth. See LABYRINTH, ARCHITECTURE.

CARRARA MARBLE. *In sculpture.* A fine kind of marble, the quarries of which are on the south side of the Apennines, at Carrara, a principality and town of Italy, in the Duchy of Massa. These quarries were well known to the ancients, who called the marble *Lunense*, and Ligustrum (Lombard); and the places are still shown from which the marble was dug for the construction of the Pantheon. It is often raised in very large masses, and is of different colours as well as properties; some being best adapted for building, others for statuary. See MARBLE.

CARTOON. [*cartone*, Ital. *carton*, Fr.] *In painting.* A drawing or painting upon large paper, usually made as patterns for painting in fresco, tapestry, musaick, &c.

In either of these manners of delineations, the artist cannot trace his entire outline, as on the canvass, therefore he is under the necessity of making the entire design the full size of the intended work, on large paper joined together; the outline is then neatly punctured with a needle, pin, or other point, and the outline thus transferred, as wanting, upon the work. The finest works of this kind are those celebrated ones of Raffaelle, in the possession of the king, and preserved in the royal palace at Hampton Court, called emphatically *the Cartoons*. They are part of a series of designs made for tapestry, and were purchased by Charles the First. They are deservedly reckoned among the best of Raffaelle's works, and consequently among the finest works of art. Richardson has given an accurate historical and critical description of them, and, in his opinion, they are more fitted to convey a true idea of the genius of Raffaelle, than even the loggia of the Vatican. The tapestries that have been wrought from them, are but shadows of the originals; yet are preserved with great veneration at Rome, and only shown on a few days in the year, in the gallery which leads from St. Peter's to the Vatican and never fail attracting an immense crowd to view them. Towards the end of the year 1797, the French government exhibited, in the Salon du Musée, several tapestries worked at Brussels, which were said to have been executed after the designs of Raffaelle.

The Cartoons at Hampton Court have been several times engraved, first by Gribelin in Queen Anne's reign, next by Dorigny, and since that, by several inferior artists, most probably from the other engravings. They have also been engraved lately in small by Tiffin, and of a very large size and in a splendid and superior manner by Holloway. (See Month. Mag. for Jan. 1809, vol. XXVI. p. 561.) Another very fine cartoon, by Raffaelle, of the Murder of the Innocents, is in the collection of Prince Hoare, Esq. secretary for foreign correspondence to the Royal Academy.

Cartouch or Cartouche. [Fr. *cartouche*, Ital.] *In architecture.* An ornament in the key stone of an arch, the centre of an entablature, &c. representing a scroll of paper unrolled, for the purpose of inscriptions, &c.; they are rarely used by artists of good taste.

Caryatides. [from Carya, a city of Peloponnesus, "Caryatides columnæ, à Carya, Laconiæ oppido." Vit.] *In architecture.* Figures in long drapery used to support entablatures instead of columns and pilasters, the origin of which, according to Vitruvius (i. 1.), is that the inhabitants of Carya, a city of Peloponnesus, made a league with the barbarians in the Persian war against the other people of Greece; but the Persians being conquered, the Caryates were afterwards besieged, their city taken and reduced to ashes, the men put to the sword, and the women carried away to slavery. To perpetuate the memory of this victory, the conquerors caused public edifices to be erected, in which, as a mark of degradation and servility, the figures of the captives, in their matronal robes and ornaments, were used instead of columns, in the servile office of supporting entablatures; thus transmitting to posterity their infamy and punishment. The most complete genuine specimen of these statues is to be found in the Pandrosseum at Athens; one of which is in the British Museum. When figures of the male sex are used, they are called Persians or Perses. See Caryphoric, Prices. The most beautiful caryatides of modern workmanship, support the tribune of the Salle des Gardes in the Louvre; they are from the chisel of Jean Goujon. Several representations of Caryatides are to be found in Stuart's and Le Roy's Antiquities of Greece, Sir William Chambers's Civil Architecture, &c.

Carystia Marble. A beautiful marble found at Carysta or Carystos, a city upon the shore of Euboea.

Casement. [*casamenta*, Ital.] *In architecture.* A window opening on hinges.

Cast. [*kaste*, Dan.] *In sculpture.* Any thing which is cast in a mould. The art of casting statues, &c. of various materials in moulds is very ancient. It was practised in great perfection among the Greeks, and afterwards so much among the Romans, that the number of statues consecrated to the gods and heroes surpassed all belief. See Bronze, Sculpture.

Castellated. *In architecture.* Enclosed within a castle; a building in the style of a castle. See Castle.

Casting or Draperies. *In painting.* The proper distribution of the folds of garments in painting or sculpture; they should appear to be the result of chance rather than of study and labour. Nature, which is the surest guide in every thing of art, is the best model. Order, propriety, contrast, and diversity in the drapery, are necessary to contribute to the harmony of the whole.

Castle. [caywel, Sax. *castellum*, Lat.] *In architecture.* A fortified building, for de-

fence; also a house furnished with towers, encompassed by walls and ditches, and strengthened by a moat or donjon in the midst. Many plans of ancient English castles may be found in the numerous topographical works that have been published in England, particularly KING's *Munimenta Antiqua*, 4 vols. fol. 1799. Sequel to the same, published in the sixth volume of the Archæologia. GROSE's Antiquities of England and Wales, of Ireland and of Scotland.

CATACOMBS. [from Κατακοιμάω, I sleep out or away, or from Κατὰ and Κύμβος, a hollow or cavity.] *In architecture.* Cavities or subterraneous places, used for burying the dead, and which the ancients called *hypogeum*, *crypta*, and *cœmeterium fornix subterranea*, &c. They are monuments of great curiosity, and may be traced back to the remotest antiquity. In some places the catacombs were also devoted to other uses; as in Syracuse they served for the double purpose of a prison and a public cemetery. In the first ages of Christianity the word catacomb conveyed the idea of a tomb of the martyrs, and they have been transformed to places of devotion, under the idea that they likewise served as places of retreat to the early Christians from persecution; and some authors have maintained the absurd idea that they were excavated by them for that purpose. It is, however, probable that these subterraneous places naturally presented themselves as places of retreat, under the impression that the respect and inviolability in which the ancients held those places, as consecrated to the dead, would add to the safety of their asylum. It is likely that the chapels and altars found in ancient catacombs were only used when the Christian religion had become public, and protected by the emperors, and that the believers in Christianity, who assembled there for devotion, were permitted to celebrate its rites upon the tombs of their martyrs and saints. The greatest part of the catacombs appears to owe their origin to the necessary works of quarries near great towns, for stone or sand proper for their construction. Such were, undoubtedly, those of Naples and Rome; the first excavated on a soft sandy stone, which served for various purposes in building; the others in puzzuolana, which is so excellent in the composition of cement, particularly for masonry in water. The catacombs of Rome are a labyrinth of subterranean streets or narrow galleries of small height, some dug in hard or soft stone, but more often in puzzuolana, which are sometimes eighty feet below the level of the ground. They extend to a great and almost unknown length, and branch out in various directions. The ground of the country round Rome is nearly all a sandy soil, but the few interesting discoveries that have been made, and the little order observed in the excavation, have led to the abandonment of a regular search after their entire plan. There are, however, more than thirty known and distinguished by particular appellations, such as *Cœmeterium*, *Calixti*, *Lucinæ*, *Aproniani*, *Feliciani*, *Valentini*, &c. The two sides of the galleries of these catacombs, from top to bottom, are used for the reception of sarcophagi, placed in niches, and enclosed by thick bricks, or sometimes slabs of marble. These niches were ranged in rows one above the other, the number according to the depth of the excavation. The names of the deceased were sometimes inscribed upon the urn or upon the bricks, by which it was enclosed, sometimes with a branch of palm and the word "*Christ.*" But there are also frequently found marks of Paganism, which proves that these cœmeteries were indiscriminately used for the reception of those who had professed different kinds of worship.

The catacombs of Naples are larger and finer than those of Rome; in them have been found monuments in marble, with Greek and Latin inscriptions. Several towns in Sicily, as Catano, Palermo, Agrigentum, and Syracuse, possess the same kind of excavation, and which are used for the same purposes. The catacombs of Syracuse are the largest and best preserved that exist, and perhaps are the best to give an idea of them in general. They may be compared to a subterranean town, with its great and little streets, its cross streets, and places cut in the rock, in several stories, and evidently dug for burying places; there are also other excavations of the same town, which were certainly quarries. The catacombs which are just mentioned could hardly have been for the digging of stone, the openings being neither large nor commodious. The ornaments which are to be met with in different parts, and have been added in later times, are reduced to some bad Greek paintings executed about the latter period of the empire, upon plastering affixed to the rock, having Greek or Latin letters, as well as symbolical paintings of the martyrs, in the interior of the tombs. In general the catacombs of Syracuse have not the funereal appearance of those of Naples and Rome; there reigns a mysterious stillness, which

proclaims it to be the sanctuary of repose. By this monument we may form an idea of the grandeur of the city, formerly so powerful and so thickly peopled. The catacombs of Malta are very small, but in good preservation; they appear to have been constructed, at the same time, for the interment of the dead, for concealment, and to celebrate the ordinances of Christianity.

The following is a list of the principal catacombs in the world. The most ancient are probably—1. Those of Egypt; five series or sets of which have been described by modern travellers in various degrees of preservation; namely, those of Alexandria, Saccàra, Silsilis, Gournou, and the tombs of the kings of ancient Thebes. II. The catacombs of Italy. Those of the greatest antiquity in this part of Europe are probably those of Etrusia. There are also catacombs at Rome, in Naples, at Syracuse, at Malta, at Gozzo. III. The catacombs of Paris, which were formerly quarries whence the ancient inhabitants obtained their free stone. They were converted into catacombs for the relics of the dead by M. Lenoir, lieutenant-general of the police, in 1780. The most valuable works on this head are CLARKE'S *Travels in Europe, Asia, and Africa*, vol. v. p. 388—394. RICHARDSON'S *Travels along the Mediterranean*, &c. vol. i. p. 19—21, 266—269. DENON, *Voyage dans l'Haute et Basse Egypte*, p. 117, 119, 172, 235, 242, Paris, 1802. BELZONI'S *Narrative of Operations and Discoveries in Egypt and Nubia*, p. 156, 157, 4to. Lond. 1822. MALTE BRUN, *Annales des Voyages*, tom. xiii. Bulletin, p. 254. EUSTACE'S *Classical Tour through Italy*, vol. ii. p. 90—94, 8vo.; *Voyage dans les Catacombes de Rome, par un Membre de l'Académie de Crotone*, Paris, 1810. WILSON'S *Journal of two successive Tours on the Continent*, vol. iii. p. 20—24. HUGHES'S *Travels in Sicily*, &c. vol. i. p. 75—79. Sir R. C. HOARE'S *Classical Tour through Italy and Sicily*, p. 409. THURY, *Description des Catacombes de Paris*, part. I. p. 44, 8vo. Paris, 1815.

CATALOGUE. [Κατάλογος, Gr. *catalogus*, Lat. *catalogue*, Fr.] *In all the arts.* An enumeration of particulars. A catalogue of works of art, with anecdotes of the artists whose works are enumerated, particulars of the pictures, &c. is one of the most useful aids to an artist or a critic that can be imagined. Catalogues should have two objects; one, that of directing the inquirer, in his visits to the best collections, to the leading objects; and the other, that of informing those who cannot see the originals with their respective and comparative merits. There is another sort of catalogue extremely useful in the history of the arts, which does not refer to any entire collection, but gives, under a systematic arrangement, lists of all the great works of one school, of all the works of one great master, and the respective places where they are to be seen. Some distinguished collectors have published descriptive catalogues of their collections, and which are usually called, *Catalogues raisonnés.*

CATENARIA. See ARCH.

CATANIA. *In the history of the arts.* An ancient city of Sicily, situated in the Val Demona, on the borders of the Val di Noto, at the foot of Mount Ætna. It is the ancient Catana, and has been three times overwhelmed by the lava of Ætna, or desolated by earthquakes; but it has always risen from its ashes more splendid than before.

CATHEDRAL. [Καθέδρα, Gr.] The supreme church of any diocess, so called from possessing the episcopal chair called Cathedra; which anciently meant any easy commodious chair. "Supinæ in delicias cathedræ," says Pliny; and the epithet may still apply. The ancient cathedrals of Europe, especially those of Germany and England, are remarkable as being the oldest monuments of Gothic, Saxon, Old English, and Roman architecture in existence. (See ARCHITECTURE, BASILICA, CHURCH.) The *cathedral* or bishop's church in the African canons is frequently termed *ecclesia matrix*, that which required the care and residence of the bishop, as the principal church of the diocess; and so called in contradistinction to the ecclesia *diœcesanæ*, upon which only presbyters resided. The council of Carthage in its decrees, terms the *ecclesia matrix* "*principales cathedræ.*" See STAVELN'S *History of Churches in England*, vol. v.

CAVÆDIUM. [Lat.] *In ancient architecture.* An open court within the body of a house. The cavædium differs from the atrium and the vestibulum, although some authors consider them synonymous. Vitruvius describes five sorts of cavædia, *Toscanicum* (Tuscan), *Corinthium* (Corinthian), *tetrastylon* (tetrastyle), *displuviatum* (uncovered), *testudinatum* (vaulted). See VITRUVIUS.

CAVE. [from *vavea*, Lat. *cave*, Fr.] A hollow place under ground. See CELLAR.

CAVEA. [Lat.] *In ancient architecture.* The dens or stables for the wild beasts, under the seats and round the arches of the amphitheatre: also used by some authors for the amphitheatre itself. See AMPHITHEATRE.

Cavetto. [Lat.] *In architecture.* A concave moulding of a quarter of a circle.

Caulicoli. [*cauliculus*, Lat.] *In architecture.* Small stalks or stems like twists or small volutes under the flower, or the abacus in the Corinthian capital.

Causia. [Lat.] *In archaiology.* The name of the Macedonian hat; and in costume it characterizes this people as much as the tiara does the Persians, and the mitre does the Phrygians. The form is preserved to us on the medals of Alexander I. King of Macedon.

Cecropium. *In the history of architecture.* An ancient name of Athens after its founder Cecrops. See Athens.

Cedar. [Κέδρος, Gr. *cedrus*, Lat.] *In architecture.* A tree whose timber is sometimes used in building. Its wood is so bitter and distasteful to insects, that it is reckoned almost incorruptible. It is much used in the east, and is often mentioned in the Old Testament. The temples of Jerusalem and of Diana at Ephesus were constructed of this wood. Pliny mentions it as much used from its great duration; and Pausanias and other ancient authors speak of statues of cedar wood.

Cell. See Cella.

Cella. [Lat.] *In architecture.* A chapel or private part of a temple. It signifies the interior part of a temple: the sanctuary in which the statue of the divinity to whom the temple is dedicated is placed. It is also called in Greek *ναός δόμος σηκός*, and from thence the porticoes which precede them were called *pronaos*, *prodomos*. There was often behind the cella a chamber to contain the treasure of the temple, which was termed *opisthodomus*, that is, the hinder part of the cell. The length of the cell was double its width, the width was divided into four equal parts, the length accordingly was divided into eight; the cella, properly so called, occupied eight, comprising the wall, which separated the pronaos, and in which was the entrance to the cella. The three other parts from this wall to the centre formed the pronaos or the portico which preceded the cella. They always gave the antæ the same proportions as the columns of the portico. In those temples, the cella of which were not sufficiently wide, the space between the antæ was left open, and the entablature supported by the ante alone. Of this, we have an example in the temple on the Ilissus, near Athens. When the cella was more than twenty-feet wide, they placed two columns between the antæ, as in the temple of Theseus at Athens, and that of Minerva on the Sunium promontory. The three intercolumniations between the antæ and the columns were enclosed by balustrades of marble or wood, in which they left a door to enter the pronaos. When the cella was more than forty feet wide, they placed other columns in the interior of the pronaos, opposite the columns that were between the antæ to support the cieling of the pronaos. Such are the rules that Vitruvius has given for the disposition of the cella. But the ruins of some ancient temples are opposed to this arrangement, especially as to the length and width of the cella, which is proved by the measurements of that portion of the temple and of the pronaos. From which it is found that they sometimes gave a different distribution to the hypæthros; hence we may conclude, that Vitruvius only spoke of the other kinds of temples. One of the peculiarities of the cella of the hypæthros was, that the upper part was not covered: that its length was more than double its width, and as each façade had an entrance, there were both a pronaos and a porticus. The other kinds of temples have generally but one entrance, and, indeed, the little extent of the cella needed but one. This may be seen in many of the existing ancient temples, as that of Theseus, that formerly on the bank of the Ilissus at Athens, the temple near Mylasa, that of Jupiter, Nemæus, between Argos and Corinth, and Apollo Didymæus, near Miletus, &c. But if the length of the cella required it, they gave two entrances to the hypæthros, one at each extremity. This is what Vitruvius says in distinct terms, and it is further proved by the ruins of several remains of this kind; as the great temple at Pæstum, the Parthenon at Athens, and the temple of Jupiter Panhellenius in the island of Egina. Pausanias mentions a temple which had no entrance at all; that of Jupiter Lycæus, in the public square of Megalopolis, the capital of Arcadia. It is probable that this temple was very small, and rather a species of monument than a regular cella of a temple; the altars, tables, and eagles, which, according to Pausanias, were consecrated to the god, appear not to have been in the interior, but in the front and side of the temple. For which reason the temple and the consecrated place which belonged to it were surrounded by a dwarf wall or peribolos.

To cover a part of the cella of the hypæthros, the ancients often erected an interior portico, which was continued all round, and consisted of two ranges of columns placed one above the other. This portico had two stories or galleries. The lower

one formed a covered place in the cella, and the highest served to reach the upper part of the statue of the divinity that was placed in the temple. Such double galleries were found in the temple of Jupiter Olympius; and the great temple of Pæstum appears also to have a similar arrangement. There were large stones placed upon the architrave, that was supported by the lower columns, large stones which united the walls to the cella, and formed, at the same time, the ceiling of the lower gallery and the floor of that above.

Generally each temple had but one cella, and there is but one kind of Tuscan temple which had three cellæ, one on the side of the other. Sometimes they divided the cella of the Greek temples into several divisions, and in that case they are not placed one on the side of each other as in Tuscan temples, but one behind the other. At Sicyone, there was a temple having two cellæ or divisions; in the first there was erected a statue of sleep, and the last was consecrated to the Casnean Apollo; which no one was allowed to enter but the priests. Near Argos, on the road to Mantineas, there was also a temple with cellæ; in one of which was a statue of Venus, carved in wood, and had its entrance towards the east; and the other, which was consecrated to the worship of Mars, was towards the west. At Mantinea, there was a temple of the same kind: in one division of the cella was a statue of Æsculapius, and in the other Latona and her infants, executed by Praxiteles. A temple of Ilithyia, in the sacred wood of Altias at Olympia, had also a double cella. In the first was the altar of Ilithyia, in the one behind they worshipped Sosipolis, the titular divinity of the Eleates; no one dared enter into this cella but the priestess of the temple, and she at such times was always veiled; during which time, the young girls sacrificed upon the altar of Ilithyia. In this class may also be ranked the Erechtheium at Athens, of which the anterior part was consecrated to Erectheus, and the posterior to Minerva Polias. At Sparta there was an ancient temple which had two cellæ, the one below the other; in each there was a statue of Venus, and that of the upper cella bore the surname of Morpho; Pausanias considers this singular disposition as unique of its kind.

The cella was almost always built of large stones, in the manner called by the ancients *isidomon* (see this word and Greek Architecture), but sometimes with the stones of the ordinary size. The pavement was always raised higher than that of the portico, consequently there were always steps at the entrance, as is seen in the Parthenon, the two temples at Pæstum, that of Jupiter Panhellenius, and several others. The exterior sides of the cella were very simple, and had scarcely any ornament. At the four corners are the antæ, which, originally, were evidently built for strength, as counterforts; and which afterwards they ornamented with bases and capitals to give them a more agreeable form. The wall between these antæ was without ornament; they were satisfied by adding a base to the lower part, sometimes the same as the base of the antæ, sometimes differing from it in having fewer members. The upper part was ornamented with several members, or with an entablature like that of the portico, but less complete. The frieze was not so high; sometimes it had triglyphs, as in the great temple at Pæstum, and that of Apollo Epicurius at Phigaleia; sometimes it was without, as in the temple of Jupiter Panhellenius in the isle of Egina.

In some temples the cella was ornamented with bassi rilievi, with which they also ornamented the frieze; as in the temple of Minerva on the Sunium promontory, where is represented the combat of the Centaurs and Lapithæ; upon that of the Parthenon, sacrifices and solemn processions of the Athenian people, called Panathenæa; and at the temple of Theseus at Athens, the combat of the Centaurs; and that of Apollo Epicurius with similar subjects. Above the doors, both in the pronaos and porticus, of the cella of the temple of Jupiter Olympius at Olympia, is represented the labours of Hercules; on the front entrance are five;—the taking of the Erymanthean boar; the death of Diomede, King of Thrace; the combat with Geryon; Hercules sustaining the heavens in the room of Atlas; and the cleansing the Augean stables. And on the rear entrance are represented six others; namely, the conquest of Hippolyte; his taking the stag with brazen horns; the conquest of the Cretan bull; the destruction of Stymphalidæ; the conquest of the Lernæan hydra; and of the Nemæan lion. M. Quatremère de Quincy, in his Jupiter Olympien (p. 261. pl. xii. fig. 3.), imagines that these representations formed a continued series of bassi rilievi, but Mr. C. R. Cockerell is of opinion that they were separate in the metopes, as in the temples of Theseus and of Apollo Epicurius. In the interior of the cella was placed the statue of the god to whom the temple was

dedicated; it was always raised upon a base opposite the entrance, and placed against the rear wall. In the hypæthros it was placed near to the door of the rear front, at the place where the galleries and porticos of the interior joined and formed a canopy over the statue; but as this was hardly sufficient to protect it from the injuries of time, they placed a veil or curtain before it, when they were not sacrificing. There was a most magnificent curtain in the temple of Jupiter Olympius; it was a present from Antiochus, made of wool, curiously wove in the manner of the Assyrians, and coloured with Phœnician purple: one of the same kind was in the temples of Diana at Ephesus and at Athens. (See PEPLUM.) When they wished to expose the statue, they lowered the curtain, as in the temple of Jupiter Olympius, or raised it as in that of Diana. This curtain was not used, as Stuart thinks, for a covering to the middle of the cella of the hypæthros, and cannot be compared with the velaria of the Roman theatres and amphitheatres. The Romans also used this word for the name of apartments in their baths, as *cella caldaria, cella frigidaria, &c.* See BATH. The reader is also referred to *A Description of the Collection of Ancient Marbles in the British Museum*, part iv. 4to. Lond. 1820; STUART's *Antiquities of Athens*, vol. ii.; WILKINS's *Antiquities of Magna Grecia;* LE JUPITER OLYMPIEN, *ou L'Art de la Sculpture antique considéré sous un nouveau point de vue, par* QUATREMERE DE QUINCY.

CELLAR. [*cella*, Lat.] *In architecture.* The lowest apartment of a building when under ground, and used for stores, &c.

CEMENT. [*cæmentum*, Lat.] *In architecture.* An adhesive binding compost of sand, lime, or other materials. The matter with which bricks, stones, &c. are made to cohere. The principal cement in building is called mortar, and is composed of calcareous earth, or lime made from chalk, limestone, marble, spars, gypsum (which forms plaster of Paris), shells, and various other similar substances. The proportions of calcareous cements for the purpose of building is best derived from experience, as the strength and other qualities of the component parts differ so much. The general manner of making mortar, or common building cement, should be as follows:—the lime should be slaked with water and a layer of sand, in the proportion of about twice as much sand as lime, covered over, and so on, layer upon layer, till the whole is wetted. The heap should be covered over with sand, to prevent the steam and vapour of the slaking lime to evaporate. It should then be screened and quickly made into mortar, by wetting it, and well beating it with shovels or beaters for use. There are many other kinds of cements, which are omitted, as not appertaining to this work; but their component parts and comparativements, may be found in URE's *Dictionary of Chemistry.*

CEMETERY. [Κοιμητήριον, Gr. *cœmeterium*, Lat.] *In architecture.* A sleeping place. A building, or where the dead are deposited. In the allegorical language of the ancients, Death was the sister of Sleep; hence it is not surprising that the word cemetery or dormitory should be applied to places destined to public burial, particularly by Christians, to whom death itself is but a sleep. The most ancient cemetery we are acquainted with, and perhaps the largest in the world, is that of Memphis, which was discovered in a circular plain without the town, of about four leagues diameter, and which is called the plain of mummies. The care of the Egyptians in burying their dead appears to have been directed to the preservation of the body, rather than to perpetuate the memory of the deceased. The Greeks and Romans were not so careful to preserve the body; being in general satisfied in merely burying them. The custom of burning the body and preserving the ashes, seems to show that their aim was rather to preserve it from violation than from destruction. We may rank among *public cemeteries* those numerous sepulchres which are in the suburbs of almost all the ancient cities; the laws having proscribed them from the interior of the town. The avenues and roads, subterranean places and fields, reserved for this pious use, became themselves a kind of town, the houses of which were the sepulchres. Each family had their own, and at certain times were accustomed to visit the manes of their ancestors. They sometimes gave these funereal towns the name of Elysian fields. Though ages have passed since they were used; it is impossible to visit those which encircle the town of Puzzuoli in Italy, and near D'Arles in France, or any of the catacombs, without emotion.

Of all the ancient burial places, no one conforms so nearly to modern ideas of cemeteries, as that of Arles. A large plain, strewed with sarcophagi and funeral monuments, present only remains of what once resembled a town. In the early ages of Christianity, the cemeteries were established without the cities, and upon the

high roads, and dead bodies were prohibited from being brought into the churches, but this was afterwards abrogated by the Emperor Leo. The custom of burying in churches was derived from the earliest times of Paganism, for we know that the Egyptians always constructed their sepulchres in the neighbourhood of their temples; or, from the habits of the early Christians celebrating their religious rites in the catacombs or cemeteries, upon the tombs of their martyrs. It was also in cemeteries that they built the first churches of which the subterranean parts were catacombs. These were soon appropriated to the rich, and the enclosures of the church were reserved for the burial of the multitude. It is to such as these that the name of cemeteries more particularly apply. The custom of burying in churches and their enclosures, was mostly confined to country places, for in cities and towns, from a regard to public salubrity, they always constructed their burial places without the outer walls, which was more necessary, as by the enlargements of the towns, the portions which were appropriated to public cemeteries would not only be too small for the population, but in time become situated amidst the habitations of the citizens, by which their health would be continually exposed to their dreadful influences.

The cemeteries of England and most other modern countries are merely graves, either private or common, in which they pile one generation upon another; and at times, as in Paris before the adaptation of the catacombs, were obliged to empty these mortuary fields, from which many inconveniences frequently arose.

Naples and Pisa have cemeteries, which may be regarded as models not only for good order and conveniency, but for the cultivation of the arts and the interest of humanity. The arrangement of the grand cemetery at Naples particularly tends to the preservation of health. It is composed of a large enclosure, having three hundred and sixty-five openings or sepulchres, answering to the days of the year, symmetrically arranged. Each opening is closed by a stone, which serves as a covering. To this common depôt corpses were brought from all parts of the town. Each day one of these graves was opened, which at the end of the day was closed and sealed, after having used the precaution of throwing in a quantity of lime, which, by the time of reopening at the end of the year, had consumed the bodies in such a manner that nothing could be feared from the effects of putrefaction. This method of burying is particularly necessary in those places where the immense population allows no interest to supersede that of salubrity.

The *Campo-santo*, or cemetery of Pisa, is on every account worthy of attention. As a work of art it is one of the first in which the classical style of architecture began to be revived in modern Europe, and by the extent of its plan, by the grandeur of its conception, and the excellent purposes to which it is devoted, it is one of the most remarkable monuments of Europe. UBALDO, Archbishop of Pisa, in 1200, first projected the idea of this vast undertaking. John of Pisa, the most celebrated architect of his time, was entrusted with its construction, and he displayed in it great ability. The length of this cemetery is about four hundred and ninety feet, its width one hundred and seventy, height sixty, and its form rectangular. It contains fifty ships freights of earth from Jerusalem, brought hither in 1288. The façade of the southern front is composed of forty-four pilasters of a good proportion, which support an equal number of arches, proving that the Pisan architects had already abandoned pointed arches and gothic forms. At the top of each capital, and where the arches unite, is a grotesque mask carved in marble, the work of which, as well as that of the capitals, partake of the capricious style that was prevalent at that time. The whole of the edifice is constructed with white marble, the greatest part from the mountains of Pisa, regularly squared and jointed with great care. Two side doors afford entrance to the interior, which forms a vast court of four hundred and sixty feet long, surrounded by an arcade formed by sixty-two arches of a demigothic form. The two larger sides have each twenty-six arches; five only compose the two smaller sides. The arches, which are of the style of the exterior, are supported upon columns, to which a continued surbase serves as a pedestal. The galleries are paved with fine marble, and ornamented with various specimens of early painting, the works of Giotto, Cimaleue, and other ancient masters. Queen Christina of Sweden, called this cemetery "Non un cimeterio ma un museo." Fine antique sarcophagi ornament the whole circumference, raised upon consoles, and placed upon a surbase breast high. Under these funereal porticoes, the monuments of celebrated men are still to be seen, of whom the republic of Pisa preserved the resemblances and honoured the memory. It was there the King of Prussia

raised a monument to the celebrated Algarotti, with the inscription—*Algarottus non omnis.* The cemetery of Pisa completely accords with the idea of the simplicity and funeral grandeur that would be supposed to belong to such a building. Upon this form and model cemeteries should be established near all populous cities. The enclosure in the middle should constitute the common burial place, and the divisions of the sepulchres may be formed after those of Naples, or by establishing public and private vaults or graves, as might be thought most proper. The galleries which surround the interior, could be reserved for mausoleums, cenotaphs, tablets for inscriptions, and monuments of every kind to perpetuate the memory of the dead. The most ancient manner of embellishing insulated cemeteries, was by planting trees, cypress being generally used. These were placed along the most cheerful places, along rivers and roads, and upon small hills, accompanied by monuments which invited passengers by their form and inscriptions, and by the hospitable shadows the trees afforded to contemplation. The Turks always erect their cemeteries outside the towns; and they endeavour to render them as agreeable as possible by planting odoriferous shrubs, especially in the environs of Smyrna, where there are an abundance of cypress trees and rosemary plants, which spread a salubrious fragrance. This custom of planting trees about cemeteries, has also been found to be practised in the Middlebourg and Society Islands. It serves not only to designate the character of the places where they are planted, but also to purify the air.

CENOTAPH. See CŒNOTAPH.

CENTAUR. [Κένταυρος, Gr. from κεντέω to goad, and ταῦρος a bull, *centaurus*, Lat.] *In archaiology.* A poetical being of Thessalian origin, supposed to be composed of a man and a horse. The inhabitants of Thessaly being great horsemen, and their country abounding with wild bulls, they became expert in their chase, and hence acquired their name and gave rise to the fable. The most usual way in which these fabulous beings are represented by artists, is with a human head, arms, and trunk, joined to the body and legs of a horse, just above the chest. Their mythological origin was from the gallantry of Ixion with the cloud which he mistook for Juno. According to Pausanias, there was represented upon the ancient monument called the sarcophagus of Cypselus, a centaur, of which the fore feet were those of a man, and the hinder ones of a horse; and they have been similarly represented on various other monuments. Far from always considering them as deformed monsters, Ovid, on the contrary, celebrates the beauty of several of them, especially of Cyllarus and his wife Thylonome, (Met. xii.) Ancient artists were fond of introducing in their compositions the representation of imaginary beings, composed of two natures, as centaurs, tritons, and sphinxes, and they often employed them with advantage. The quarrels of the centaurs and lapithæ at the nuptials of Perotheus, is alluded to in the article Amazon (see AMAZON), has been sung by Hesiod (*in Scuto Herc.*) and Ovid (*Met.* xii.), and been commemorated in the sculptures of various ancient temples. Representations of centaurs are found upon a great number of ancient monuments, and in the most varied attitudes. Phidias was the first that ennobled and almost naturalized them in his sculptures of the metopes of the Parthenon. He has been followed by a great number of imitators, and none more celebrated, or nearer approaching him, than the fine sculptures of the Phigaleian frieze in the British Museum. There are very fine centaurs of both sexes also upon many of the Greek vases; and likewise in the paintings of Herculaneum. The car of Bacchus is sometimes described as being drawn by a centaur, armed with a club or lance, and another holding a lyre or some other musical instrument; and they are also occasionally affixed to the cars of other divinities, especially on medals. Zeuxis was the first of record who ventured to personify a centaur in painting, and Lucian (*Zeuxis*), who gives a description of this picture, regards it as one of the finest and boldest of his pictures. (See Lucian, vol. i. p. 579. fr. ed.) In his time Athens possessed a very correct copy of it; the original had been sent by Sylla to Italy, but the ship which conveyed it was lost, with all its other valuables. The lower part of this centaur was that of a mare, reclining on one side; the upper part was that of a fine woman, leaning on her elbow, holding in her arms one of her two young ones, and presenting it the breast; the other is sucking its mother in the manner of colts. Towards the top of the picture was another centaur, the husband of her that was suckling the young ones; only a part of his body appeared, and he seems to be upon the watch, and inclining towards the children, to whom he is smiling; in his right hand he is holding a young lion above his head, and appears to be amusing himself with its fear. Lu-

cian observes, that the genius of Zeuxis is displayed in this picture, of uniting in one object all his excellencies, by giving to the centaur a fierce and savage air, a bushy mane disposed with stateliness, a body covered with hair, which appeared equally to belong to the human portion as well as the other. Philostratus gives a description of a painting of the same kind, representing a family of centaurs. Nonnus mentions horned centaurs, as satyrs are represented. The term centaur has also been given to other beings composed of a human body and other animals, such as ONOCENTAURA, from ὄνος an ass, BUCENTAURE, TAUROCENTAURE, *which see.*

CENTRE. See CINTRE.

CERAMICUS. [Lat. Κέραμικος, Gr.] *In the history of architecture.* One of the quarters of the city of Athens, situate on the south west side of the Acropolis. Pausanias says, that it received its name from Ceramus, the son of Bacchus and Ariadne; and Pliny relates, that it was so called from the manufactory of Chalcostinis, a celebrated modeller of statues in clay, which is sufficiently probable, because the Greek word κέραμος signifies potters clay.

CERES. *In archaiology.* The goddess of corn, tillage, and husbandry, the daughter of Saturn and Ops. In the Vatican are some fine antique statues of this goddess; one of them is nearly nine feet high, and was for nearly three centuries the principal ornament of the theatre of Pompey at Rome. Another of these is smaller, not above three feet six inches high.

CEROMA. [Lat. Κήρωμα, Gr.] *In ancient architecture.* That part of the ancient baths which was set apart for the use of the bathers to anoint themselves with a composition of oil and wax. Also a similar place in the gymnasia for the wrestlers. Its name is derived from the oil tempered with wax, wherewith the wrestlers and bathers anointed their bodies.

CEROPLASTIC. [from *cero* wax, and *plaistic.*] *In sculpture.* The art of modelling in wax. The art of modelling in wax, called ceroplastic, is of great antiquity. It was at first attempted by forming figures in soft matter, before working them in more hard substances. This art had probably its origin in Egypt and Persia, for the inhabitants of those countries used wax in the embalming of bodies. Some authors say that *mummy* is derived from mum, an ancient Egyptian word, signifying wax. By the title of the tenth ode of Anacreon, addressed to a Cupid modelled in wax, it appears the art was then known among the Greeks, who probably learnt it from the Egyptians. M. WICHELHAUSEN, in a small German work upon the uses of ceroplastic, says, according to the testimony of Pliny, Lysistratus, the brother of Lysippus, was the first that modelled human figures, and also the first that used wax for that purpose, running it in moulds. This artist was born at Sicyona, and lived in the 114th Olympiad, in the time of Alexander the Great. He also first applied ceroplastic to natural history. This idea of M. WICHELHAUSEN is not perfectly correct, for in reading the passage in Pliny, it appears he only intended to say that, by this invention, Lysistratus succeeded in making perfect resemblances of figures. He only made portraits cast in moulds, which were taken from nature, like many that are preserved in different cabinets of antiquities.

The Romans, the imitators of the Greeks, also had figures cast in wax. Pliny relates, that the Roman families placed busts of their ancestors, modelled in wax, in the vestibules of their palaces, and carried them in the processions of funerals before the deceased, which they considered as a mark of distinction. It was also the custom of those who sought the patronage of the great, to place in their houses a bust in wax of their patron, often accompanied with flattering inscriptions. M. Wichelhausen thinks that the lares and penates of the poor were most probably made of wax. The altar placed in the lararium of the Roman houses was covered or plastered with wax, and was polished by frequent rubbing, in the manner of encaustic. It was intended to receive the secret prayers and vows addressed to the divinities and penates, which they engraved upon it. The Greeks and Romans also used coloured wax for a kind of painting, called encaustic. See ENCAUSTIC.

In the middle age, this art met the fate of the others. Religious ceremonies appear to have contributed to its preservation. At least it is known that the faces of the figures of the saints were in wax.

The first artist who in the modern times attempted the imitation of the faces of persons alive or dead, in wax, appears to have been Andrea del Verrochio, master of Andrea da Vinci, who lived in the middle of the 15th century. The idea of making anatomical preparations in wax, is undoubtedly due to *Cajetano Julio* ZUMBO, born at Syracuse in Sicily, in the year 1656. According to some, he was a gentleman, and to others, a secular priest; but both these opinions may be easily reconciled. He had a particular talent in imitating

every thing he had seen; and an assiduous and profound study of anatomy and the antique, enabled him to make at Bologna, Florence, Geneva, and Marseilles, works which are reckoned masterpieces. What particularly draws the attention of all connoisseurs, says Millin, to his works, are the degrees of putrefaction in the human body, and the different influences of the plague upon man, which he has depicted to an extraordinary degree of truth. These preparations were for a long time in the gallery of Florence, till the Grand Duke Leopold gave them to his physician Lagusi.

By this it appears that the art of making anatomical preparations in wax originated about the middle of the seventeenth century. It was at first cultivated at Bologna. *Ercole* Lelli, born in that city, studied design with great success in the Clementine Academy, and afterwards applied himself, by an order from the pope, to the study of anatomy, and made several models both in wood and wax, for the use of the students in surgery and the arts of design. It was under Lelli that Giovanni *Manzollini*, a celebrated artist in ceroplastic, born in the same town in 1700, studied anatomy; and under Giuseppo Carlo Pedretti and Francesco Monti that he studied sculpture. Lelli endeavoured to profit by the distinguished talents of this artist in anatomy, and was assisted by him in the preparation of several models in wax and wood. Manzollini alone executed almost all the mechanical part, though Lelli passed himself off as their author, which irritated Manzollini, and they separated. He afterwards executed several preparations in wax for the King of Sardinia, for different individuals, and for some societies in London. He died in 1755, and his wife, Anne Manzollini, continued executing the same sort of works; she had received instructions from her husband and Ercole Lelli, and had herself acquired much scientific knowledge. She improved greatly in the preparations of wax, and applied to them their natural colour. She designed the veins, nerves, arteries, and other parts, from a list and description which she had herself composed. She executed the different parts, as the eye or the ear, two or three times larger than nature, for the purpose of study. Several of her productions were preserved in Turin and Petersburg. The institute of Bologna still possess a considerable collection of the anatomical preparations of this celebrated artist, and they have honoured her memory by an inscription in marble. The preparations occupy five cabinets, which are called in the institute, *supellex anatomica* of Anne Manzollini. They have also several of her books, instruments, skeletons, bones, &c. &c., her portrait, and also that of her husband. *Antonio* Galli, professor of surgery at Bologna, is incorrectly supposed by some to be the inventor of those kinds of preparations. He had made, in 1750, by different artists, uteri with the fœtus in different situations, for his own use, in his course of study. This collection is valuable, perhaps, rather from the number of the preparations, than for their correctness.

Amongst the more modern artists, the most distinguished are; L. Calza, Filippo Balugani, and Ferini. The first executed in 1760, the collection of Professor Sograffi at Padua. Balugani executed, in 1768, some anatomical preparations in wax, which merit comparison with those of Ercole. Lelli Ferini was the first that practised the art at Florence. The celebrated Chevalier *Felice* Fontana carried this art to a degree of perfection till then unknown. This learned man and distinguished artist, who has rendered his name celebrated by his knowledge in the different parts of physic and natural history, travelled for three years through the most interesting countries of Europe, at the expense of the grand duke, and afterwards employed the knowledge he had acquired for the benefit of his native country, Tuscany. The grand duke gave him the power of making experiments, and defrayed the necessary expenses for the use of the museum. Besides the excellent preparations in wax, with which he enriched the museum of Florence, he had also executed, under his direction, an anatomical statue in wood, which took to pieces, and was composed of more than three thousand pieces. France has also produced several artists, who have made anatomical preparations in wax. *Mlle* Biheron, who was born in 1719, and died in 1795, made anatomical preparations of this description, and at the same time, painted subjects of natural history upon vellum, which are at present in the museum of natural history at Paris. Vicq. d'Azyr presented a memoir in 1777, to the Academy of Sciences, upon these preparations. The Empress of Russia bought several for her cabinet, which are at present in the museum of natural history at Petersburg.

There is also a fine collection of anatomical subjects, modelled in coloured wax, after nature, in the Anatomical Theatre of Trinity College, Dublin. They are

the work of a French artist on real skeletons, and represent various stages of parturition, dissections, monsters, &c. They were presented to the college by John Lord Carteret when Lord Lieutenant of Ireland.

CEROSTROTUM or CESTROTUM. [Lat. Κηρόστρωτον, Gr. from κηρος wax, and στρωτὸς a layer.] *In painting.* A species of painting somewhat resembling encaustic, which was used by the ancients. It was generally executed on ivory or bone, with colours mixed with wax, applied with an instrument or tool of ivory, called *cestrum* or *caestrum*, pointed at one end, and flat at the other. See PLIN. *Nat. Hist.* lib. ii.

CESTOPHORUS. [from *cestus* a girdle, and φορέω, Gr. I bear.] *In sculpture.* The name of female statues which bear the cestus or marriage girdles in the bridal ceremonies of the ancients.

CESTROTUM. See CEROSTROTUM.

CESTRUM. [Lat.] *In painting.* The tool with which the ancient artists executed those kind of pictures called *cerostroti.* See CEROSTROTUM.

CHAIR. *In the history of the arts.* A movable seat, often embellished with ornaments in sculpture.

CHAIR, CURULE. [*sella curulis*, Lat.] *In archaiology.* A sort of raised embellished chair or seat of ivory, gold, &c. placed in a chariot, wherein the chief officers of Rome were wont to be carried into council. It was also a mark of distinction for dictators, consuls, pretors, censors, and ediles, who were from this circumstance called *curules.* The pontiffs and vestal virgins had also a right to a species of curule chair. Representations of the shape, form, and ornaments of this honourable seat, are to be found on many Etruscan monuments from which people the Romans received the custom through Tarquinius Priscus. Numa had before given this honour to the flamen of Jupiter, as a mark of his dignity. The curule chair was at the latter period of the republic, and under the emperors, given to foreign princes; as Titus Livius relates, that Eumenes, King of Pergamos, received from the Roman people a curule chair and a sceptre of ivory. They were sometimes of bronze, two of which are in the cabinet of Portici.

CHALCIDICUM. [Lat.] *In architecture.* According to Vitruvius, this was that part of any large building that was appropriated to the purposes of administering justice. Some interpreters of Vitruvius have supposed it to be the tribunal itself, but this could hardly be, when it is observed that in each basilica there was but one tribunal, but there were more than one chalcidicum. Festus says it was a kind of building or banquetting house, named from Chalcidicus, a city of Eubœa. "*Chalcidicum* genus ædifici ab urbe *chalcidica* dictum."

CHALCIŒCUS. [Χαλκίοικος, Gr.] *In the history of architecture.* A celebrated temple of Minerva built of brass.

CHALCOGRAPHY. [from Χάλκος brass, and γράφω I write or paint.] The art of engraving on brass or copper. See ENGRAVING.

CHALK. [cealc, Saxon.] *In architecture.* A species of calcareous earth, of an opaque white colour, and used when burned into lime, for the basis of cements. Refined by a particular process, it is used in the arts to heighten the lights in drawing on coloured papers, as well as red chalk (which is clay coloured by the oxide of iron), to mark the middle tints and shades. Charcoal and black chalk is also used for the same purposes; when more colours are used, they are known by the term crayons. See CRAYONS.

CHAMBER. [καμάρα, Gr. *chambre*, Fr.] *In architecture.* An apartment or room in a house, generally appropriated to lodging. The Latin *camera* and the Greek καμάρα, both properly mean a vault or arched roof, but has been adopted in our language, through the Italian and French, in its present meaning. In French the word *chambre* has a more extensive meaning, and their architects have their *chambre à coucher, chambre de parade, chambre en estrade, chambre en alcove, chambre en niche, and chambre en galetas;* while with us the word chamber almost exclusively means a bedchamber, with a single exception perhaps of *presence chamber*, in a royal palace. In magnificent houses the bedchamber affords much scope for architectural decoration; the bed may be placed in a handsome niche or alcove, and separated if wished by a balustrade, and raised as a tribunal. On one side should be a dressing room, and on the other or near it a water closet. It would be as well, when possible, if for a lady, that it should be near the withdrawing room, and contiguous to her own boudoir. The attic or upper story of most houses is usually divided into chambers or dormitories for the servants. See ALCOVE.

CHAMPHER or CHAMFER. [from the French.] *In architecture.* To channel, furrow, or make hollow. Also to bevel off the edge of a door or window jamb.

CHANCEL. [*cancelli*, Lat. *chancel*, Franco-Norman.] *In ecclesiastical architecture.* Lattice work. An enclosed place at the east end of a church, in which the altar is placed, separated from the rest of the church by cancelli or lattice work. Also a similar place in the ancient basilica, similarly divided to keep the judges, &c. separate from the people.

The right of a seat and of sepulture in the chancel belongs, in most parishes, to the rector or vicar, as the king and parliament at the reformation (in spite of the vehement remonstrances of Bucer and others, against retaining the distinction between the body of the church and the chancel as tending to magnify the priesthood) ordained, in the rubric, that "the chancels shall remain as they have done in times past;" and that part of the church is consequently repaired by him.

CHANCERY or CHANCELLERY. [*chancellerie*, Fr.] *In architecture.* The palace or residence of a chancellor for the time being. It should consist of large and splendid apartments, as audience and council chambers, &c. The chancellery at Rome, the work of Bramante, is one of the finest modern buildings in that city.

CHANGE. See EXCHANGE.

CHANNEL. [*cannalis*, Lat.] *In architecture.* A small furrow or gutter upon a column, also indentings cut in plain faces instead of raised mouldings. See FLUTE.

CHANTRY or CHAUNTRY. *In ecclesiastical architecture.* The place in churches where they chant. In Catholic countries a chantry, like that described in Shakspeare's Henry V,

> "I have built two *chauntries*
> Where the sad and solemn priests sing still
> For Richard's soul."

was a little chapel or private altar in a church, endowed with lands and revenues for the maintenance of one or more priests to pray for the release of the souls of the founder or his friends from purgatory. All chantries in England were dissolved by 1 Edward VI. 14. There were no less than forty-seven chantries in old St. Paul's at that period.

CHAPEL. [*capella*, Lat. *chapelle*, Fr.] *In ecclesiastical architecture.* A building for the performance of religious ceremonies, either adjoining to a church or erected separately from it. The general distribution of a chapel of the protestant religion does not essentially differ from that of a church, except as to its size, and seldom being so expensively decorated. An architect's first aim in designing a chapel should be to accommodate it to the style of worship it is intended for, and all other minor considerations follow of course. Chapels are also annexed to churches, and are sometimes called after the names of persons who are buried in them, and are, in fact, a species of mausoleum; and at others chapels of ease.

In Roman Catholic countries similar chapels are annexed to their churches, and called after the name of the saint whose statue decorates it. The best models of these last kind of chapels are those to the church of St. Maria Maggiore, and the Pantheon at Rome; the chapel of Henry VII. at Westminster Abbey; the chapel of St. George at Windsor; and the morning prayer chapel, St. Paul's, London; the *sainte chapelle* in the ancient palace of Saint Louis at Paris, a venerable Gothic monument; and the chapels of Versailles and Vincennes.

CHAPLET. [*chapelet*, Fr. from the Latin *caput*.] *In architecture.* An ornament carved into round beads in imitation of a garland or wreath for the head, or of the beads used by the Catholics to count the number of their prayers. By analogy, similar mouldings of leaves, &c. are sometimes called chaplets.

CHAPTER HOUSE. [*capitulum*, Lat. *chapitre*, Fr.] *In ecclesiastical architecture.* A building attached to a cathedral in which assemblies of the clergy are held. The arrangement and fitting up of a chapter house should be with benches, stalls, chairs, &c. arranged for the different orders of the clergy, and sufficient to accommodate the numbers and rank belonging to the diocess; for whose use it is intended. The ecclesiastical court in St. Paul's cathedral is a beautiful example for such a court.

CHARACTER. [Lat. Χαρακτὴρ, Gr.] *In all the arts.* Description, title, or quality. Originally a stamp, seal, or branding iron. Although this word, in its primitive sense, signifies a mark or figure impressed upon an object by which it may be known; yet, in the language of the arts, it is figuratively applied to those adventitious qualities which are or may be conferred by any external or internal means; and determine in a distinctive manner the qualities, whether good or bad, of any person or thing, whether virtues or vices, merits or demerits, effects or defects.

Character is *general* and *particular*. *General character* is that form which is most apparent, and is determined at first sight; such as the form of the head, the body, the arms, and legs of human beings and animals; the form of a building, the manner and order in which it is built; the shape

[illegible] and [illegible] to [illegible] of particular character [illegible] some [illegible] distinction [illegible] the [illegible] [illegible] [illegible]

Pierce and other French authors and artists, means a species, sometimes that resembling, or composition of, engine, invention, device, or contrivance, that are now better designated by the word machine (see CHARLATAN). Not Pierce, as popular is to be done "to show a superior degree of skill;" and Be Pierce says, "those are charged outlines that please because they are above the level of ordinary minds, and carry with them an air of freedom, with an ease of pencil, which accompanies most powerful, when and as it accesses the grand manner." This manner is not practised by the popular painting, and is only a deception often practised in concealed bad drawing. It can only be followed in sketches and lost thoughts; nature does not admit of such rugged, undetermined, and double outlines, neither should a representation of her works.

CHAPELET. See CAR.

CHAPELLE HOUSE. See CHAPELLERY.

CHASING. *In sculpture.* The art of embossing on metals. This is the art of representing figures, &c., in a kind of basso relievo, which is punched out from behind, and sculptured on the front with small chisels and gravers. It has been applied with much success to watch cases, some of which, by the late Mr. Hosset, are perfect specimens of miniate sculpture.

CHEF D'ŒUVRE. [Fr.] *It is the work.* A master-piece, a fine work of art. The same as *Cape d' œuvre* in Italian.

CHENISCUS. [Lat. χηνίσκος, Gr. from χήν, a goose.] *In architecture.* That part of the ancient ships which was in front, because of its being fixed to a long neck, and sometimes finished with the head of a bird. This word is thus used by Apuleius, and among the pictures discovered at Herculaneum is one representing Atlantis wearing at the moment that Theseus has left her on the rocks of Naxos, in the distance of which is the ship of Theseus, connected with the chenisciu. The cabinet of the royal library at Paris has an antique chenisciu of bronze.

CHERUBIM. See MEDALS.

CHERUBIM. [Hebrew.] *In painting and sculpture.* An order of the celestial spirits. Cherubim are a species of ornaments, generally composed of an infant's head, with two wings affixed thereto, and used as keystones to arches of ecclesiastical edifices. They are among the particulars decorated by the Italian masters.

CHIAROSCURO. [Ital.] *In painting.* The art of judiciously distributing the lights and shadows in a picture. A knowledge of chiaroscuro in painting comprises the proper production of lights and shades on bodies, caused by certain passing and in certain positive figures. The pursuit of the art, which is properly comprised (see Fine Arts), is a branch of philosophy which is intended to set acquaintance with the laws of perspective, but as to itself we have instead may be a part of a knowledge of it is more to be considered than the acquisition to be to based mechanism. The light and shade distinguishing are also single figure or object are usually to be distinguished by lines supposed to be drawn from the source of that luminary to which the figure is illuminated, but circumstances being a science comprehending not only the mechanical means of light, shade, and reflexion, but of actual perspective, the proportional lines of vision, or of those qualities by which they apparently advance to or recede from the eye, and of those circumstances of transparency or opacity, depends entirely on the painter's imagination, who, variously, a master of this branch of art, dispose his objects to receive such light and shades as he proposes for his picture, and he alone can accomplish the combination of light, shade, and of opposite colours, so as to make most advantageous use to the whole. See Perspective.

In addition to just lines, angles of incidence, the painter should acquaint himself with the mechanical of those positions back by which the mechanism of reflexion of light and of shade are produced, to enable him to use such means of connecting and combining the figures and objects of his composition into such masses of light and shade as are best calculated to please the eye, and to the just accompaniment of the subject, he should assign to each object the most appropriate colour to be other, of the same time connection in just harmony with the other colours of the composition. The principal light should be thrown on the principal figure. A broad mass of shade should not be placed in a certain piece of light, for although a principal figure may stand so as to contrast to the lines of light and shade, a principal figure, and that light may be subdued by giving him a dark coloured drapery, whose middle tint appears with the shade, so as to break the mass and make it appear gradually. Chiaro and only signifies the lights of a picture but also those colours which, even in shade, are luminous, and observed only the shades, but also the dusky colours, either in light or shadow.

Chiaroscuro, on better investigation, depends so much on the artist's own feelings and imagination, that better directions for

its acquirement cannot be given, than to study the works of those masters who are reckoned the most successful in its application, to investigate their principles, and to follow them, with nature for a guide. The best treatises on the subject are to be found in the works of Sir Joshua Reynolds, the lectures of Fuseli and Opie, delivered in the Royal Academy of London, and several of the works referred to in the article painting. See PAINTING.

Chiaroscuro is also understood in another sense, as *painting in chiaroscuro* signifies such as are painted in light, shade, and reflexes only, without any other colour than the local one of the object, as representations of sculpture in stone or marble. There are some fine ones in the Vatican at Rome, by Polidoro da Caravaggio, and on the walls of the staircase of the Royal Academy of London, by Cipriani and Rigaud.

CHILD, in the plural CHILDREN. [cild, Saxon.] *In painting and sculpture.* A representation of the young of the human species. It is somewhat singular that we find no delineations of children upon any of the Greek vases nor among their earliest sculptures. Pausias, a painter of Sycion, who is mentioned by Pliny, is said to have been the first artist who excelled in this branch of the art. Before his time they were ignorant of the true beauty of the infantine figure; but after his success, the taste expanded with his reputation. Horace names the style after him, Pausaicus. After his period the practice became prevalent of representing children as genii, bearing the attributes of their deities. Others, as may be seen in the pictures discovered at Herculaneum, are represented as carrying the implements and tools of various trades, and engaged in the various occupations of man. Upon many ancient sarcophagi are found children as genii, employed in various gymnastic exercises; and even in guiding chariots around the *spina* of a circus. On a bassi rilievi in the Villa Pinciana is represented Andromache and the Trojans assembled at the Scæan gate to receive the dead body of Homer; all the personages of which are children, some with and others without wings. Buonarotti has published engravings of antique gems, upon which are genii carrying various attributes of heathen deities; and upon some sarcophagi in the same work are also genii of Bacchus, invested with the attributes belonging to that god.

Among the most beautiful representations of children now in existence are the beautiful sleeping Cupid at the Villa Albani, of which there are some duplicates in England; the Cupid riding on a tiger, at the Villa Negroni; the two Cupids, one affrighting the other with a mask at the same villa; the infant faun, formerly in the Villa Albani, but now in the Museo Pio Clementino, which Winckelmann thinks is the most beautiful infant left to us by the ancients. Another very beautiful child in the same museum, of white marble, with a bird by its side. The beautiful Cupid known to antiquaries by the name of the Genius of the Vatican; the equally beautiful fragment of a Cupid in the Elgin gallery of the British Museum, which some antiquaries have conceived to be the master work of Praxiteles.

Some of the children which are sculptured on various ancient monuments have an allegorical meaning. See ALLEGORY. The sixteen infants which surround the statue of the Nile are intended to designate the sixteen cubits which that river rises at its periodical inundations. Upon some of the imperial medals of Rome, the felicity of the time is represented by four children, representing the four seasons of the year, each of which carries some productions analogous to the season of which he is the symbol. Upon a fine medal of Hadrian, Judæa is represented by three children, who represent its three provinces; namely, Judæa, Galilee, and Arabia Petra. In the well known bassi rilievi, known by the name of the *Apotheosis of Homer*, a cast of which is in Mr. A. Day's collection, formerly in the King's Mews, London, and which is engraved in the Museum Capitolinum, and in the Museo Pio Clementino, nature is represented under the figure of an infant without a single attribute. Upon a medal of Marcus Aurelius, the *felicity of the empire* is figured by a female dressed in a stole, holding a caduceus in one hand, and a child on the other arm.

Since the regeneration of the arts in Europe, many of the most eminent artists have attempted the representation of infants and children. Besides allegorical figures, they have represented Cupids, Loves, and Genii; and even Christian subjects have given them Angels and Cherubim, which are always represented as children; perhaps from Christ's declaration, that of such was the kingdom of heaven. Among those who have excelled in the representation of children, is Albano, particularly in his charming picture of Venus and Cupids; Titian also has succeeded in his children to a marvel; while Poussin, Algardi, and many other of that

time have equally succeeded in the infantine character. Coreggio is proverbial for his charming expressions of this lovely age; the smiles of his children are quite captivating, particularly in his wonderful picture called *Il Notte*.

The painters of the Bolognese school endeavoured to carry the delineation of children and infantine angels to an extreme of perfection. In many of the pictures of Domenichino, the cherubim and infant angels are of great beauty. Bagnacavallo is quoted by Millin for the grace with which he invested his children. Albano has been before spoken of; but his beautiful wife and dozen lovely children left him no excuse of the want of models of grace and character. Pietro Facini, of the same school, produced many pictures which have admirable groups of lovely children; those have been particularly celebrated which form the group of infant angels in his excellent picture of the Patron Saints of Bologna. The infant angels of F. Brizio of the same school are also of admirable beauty. Bartolemeo di S. Marco, a Florentine painter; Nicolo Soriani of Ferrara; Domenico Piola of Genoa; Camillo Boccaccino of Cremona; and Giovanni Battista Gaulli, surnamed il Baccicciо, are also celebrated by continental critics for their excellent representation of children.

The English school have eminently excelled in the natural representation of children, their sports, and their loveliness. Sir Joshua Reynolds's Infant Academy, his Muscipula, his Cupid as a Link Boy, and his Mercury as a Pickpocket, his Puck, and a hundred others stand alone for archness, simplicity, and character. Devis, though less known, excelled in depicting this lovely branch of creation; and Sir Thomas Lawrence, in his portraits of children, has thrown a light and characteristic expression upon a difficult subject.

CHILLED. See ABSORBED.

CHIMÆRA. [Lat. Χίμαιρα, Gr. from Χίμαρος a goat.] *In archaiology.* A poetical monster, like a lion in the forepart, a dragon behind, and a goat in the middle; also a general term for any compound animal that does not exist in nature. The parents assigned by Hesiod (*Bibl.* 2.) to this monster, are Typhon and Echydna; and its form was triple. The chimæra was conquered and slain by Bellerophon, mounted upon his celebrated steed Pegasus.

CHIMNEY. [Κάμινος, Gr. *caminus*, Lat. *cheminée*, Fr.] *In architecture.* The passage through which the smoke is conducted from the fireplace. It is uncertain whether the ancients had fireplaces to warm the apartments of their houses, and apertures in the walls or chimneys to convey the smoke above the roof, as we have no authority except some recent discoveries at Herculaneum, of which only general accounts have yet reached us; but that they had chimneys for the conveyance of the smoke from those manufactories which required the aid of fire, and from the hypocaustum of their houses and baths is certain. See BATH, HYPOCAUSTUM. In the houses of England, and other northern countries, fireplaces for the burning of sea coal, for the purpose of warming the rooms, are both common and conducible to health, by the outlet it affords in warmer or crowded apartments to the respired and rarified air. In Italy and Spain, on the contrary, chimneys are rarely met with, and in some parts of Germany and Russia they are partial to the stove. See STOVE. Formerly, both on the continent as well as in England, fireplaces and chimneys were decorated with architectural ornaments, as columns, entablatures, statues, &c. like the entrance to a small temple; now they are mostly made of marble, and more the office of sculptural decoration than for the orders of architecture. The multitude of chimneys in London and other northern cities are a great disfigurement to the grandeur of their architectural views, particularly to the eye which is used to those of Italy. An architect's great aim should then be, where they cannot be avoided, or concealed, to make them as uniform and as ornamental as possible.

CHLAMYS. [Lat. Χλάμυς, Gr.] *In costume.* A tunic or loose coat, worn by the ancients over the vest or doublet. Also a short cloak worn by the Roman soldiers and by children till thirteen years of age; thence Apuleius, "Ephebica chlamyda sinistrum tegebat humerum."

CHOIR. [χορος, Gr. *chœur*, Fr.] *In architecture.* That part of a cathedral, collegiate, or abbey church, where divine service is performed.

CHORAGIC monuments. [from χορος, Gr.] *In architecture.* Monuments erected by the Greeks in honour of those who gained a prize at Choragus, or leader of the choruses in their games.

The Greeks had two kinds of games; *gymnastic*, which were held in the Palestræ, gymnasiæ and stadii; and *theatral* or *musical* games, to which the theatres and odeon were appropriated. In the musical games, it was customary at Athens, that

each of the ten tribes of the city should choose a choragus, who overlooked and arranged the games at his own expense. These chorage endeavoured to outshine each other, and he who was declared conqueror, obtained a tripod as a reward, which prize of all others was held in the greatest esteem, and was considered as extremely honourable to all the family of the victor. These tripods were executed in bronze, and generally the work of some great artist. The conqueror was obliged publicly to exhibit the prize he had obtained; for which purpose they erected a particular building or a column, where it was placed; the inscription recorded the choragus and the epoch where the games were celebrated. (See TRIPOD.) The custom of awarding tripods as prizes existed in the earliest ages of Greece. Upon Helicon were different tripods of the same kind, of which the most ancient, according to Pausanias, was the one given to Hesiod when he bore the prize. Echembrotus dedicated to Hercules, at Thebes, a tripod which had been adjudged to him as a prize, in a musical combat at Delphos.

There were a great number of choragic monuments in the city of Athens, and there was a particular street which they called the street of tripods, wherein they stood. Some of these monuments have been preserved to the present time, as the choragic monument of Lysicrates, commonly called the Lanthorn of Demosthenes; the monuments of Thrasyllus and Thrasycles, and some columns, which are all in the street of tripods, mentioned by Pausanias. The most magnificent of these buildings, and the one that has the most ornaments, is that of Lysicrates. It is placed upon a raised surbase, built of large freestones, to which the ascent is by four steps. Above this surbase, rises a circular building, composed of six Corinthian columns, the intercolumniations being filled up by a partition, formed by pieces of marble; above the columns is placed a cupola, in the middle of which is raised a flower, the leaves spreading three different ways, and no doubt the tripod was placed upon this which Lysicrates received when he was choragus. The columns project more than half their diameter from the marble facing which forms the partition between them. The bases are attic, the capitals beautifully composed and wrought with extreme elegance, differing in many particulars of detail from every other known ancient specimen. See STUART's *Antiquities of Athens*. The slabs of marble which occupy the intercolumniations are plain, with the exception of a tripod in relief, which ornaments the upper part. The architrave divided into three faciæ, bears a Greek inscription in three lines, to the following purport: "Lysicrates of Kykyna, the son of Lysitheides, was Choragus. The tribe of Akamantis obtained the victory in the chorus of boys. Theon was the performer on the flute. Lysides, an Athenian, was the teacher of the chorus. Evænetus Archon." Evænetus held this high office in Athens, the second year of the 111th Olympiad, three hundred and thirty-five years before the vulgar era, in the time of Demosthenes, Æschines, Menander, Diogenes, Epicurus, Zeno, Lysippus, Praxiteles, and Alexander the Great; an age equally celebrated for philosophy, successful military exploits, and the fine arts. The frieze of this exquisite monument of attic taste is enriched with bassi rilievi, beautifully sculptured. They represent the adventures of Bacchus with the Tyrrhenian pirates. Lord Elgin brought casts from them, which are in the British Museum, and engravings from them are in Stuart's Antiquities of Athens.

The exterior of the cupola is executed with great art, and has the appearance of being covered with laurel leaves, finely sculptured in marble. There are also three great volutes of flowers, and all round it is embellished with ornaments terminating in volutes.

This monument is vulgarly called the Lantern of Demosthenes, from a false tradition that this celebrated orator was accustomed to retire to it in order to exercise himself without interruption in the art of declamation. Without referring to the inscription which decides the original purport of the building; Plutarch determines it to be an error when he informs us that the place where Demosthenes shut himself up for three months for the purpose above stated, was subterraneous; while this has all the structure, surbase, and all above ground, and is besides much too small for such a purpose.

The elegant and original style of the architecture of this charming little structure, as well as of the sculpture with which it is adorned, and the boldness of its execution, renders it a monument of the art most worthy of consideration, or even of reproduction. For drawings alone, however correct and well finished they may be, can never give sculpture its true relief, nor this jewel of art a sufficient representation. Casts from every part of it may easily be procured, and ought to be

executed at the public expense. Indeed, an architectural museum of easy access, either connected with, or distinct from the Royal Academy, is among the greatest wants of the English students of architecture.

The choragic monument of Thrasyllus and Thrasycles is excavated in the rock on the southern side of the Acropolis, and is used at the present time as a church. The façade consists of three antæ or pilasters, the capitals of which somewhat resemble those of the Doric order. Between these pilasters were two apertures, which are now closed, with the exception of a small door. The pilasters support an entablature, the frieze of which is ornamented with wreaths or chaplets of laurel leaves and fruit. Upon the top of three steps, which form a sort of receding blocking course between a kind of attic order, was a sitting figure of great beauty, much injured by time. It is now in the Elgin gallery of the British Museum. Upon the architrave is inscribed in Greek, the purpose of the building, the name of the builder, and the date of its construction.

As such monuments were necessarily costly, the choragi were often satisfied with a single choragic column; upon the capital of which they placed the commemorative tripod. In a similar way also they erected columns as sepulchral monuments, on which were placed cinerery vases or statues. Choragic columns have been erected at Athens, upon the Acropolis above the choragic monument of Thrasyllus. There are also two isolated Corinthian columns of different proportions, which consequently could not belong to the same building; but were, according to all appearance, choragic columns, and, from the triangular shape of their capitals, which has a hole in each horn of the abacus, they doubtless bore a tripod. See TRIPOD, STUART'S *Antiquities of Athens*, and other similar works enumerated in ARCHITECTURE.

CHOROBATES. [Lat. Χοροβάτης, Gr. from χῶρος a region, and βαίνω I perambulate.] *In architecture.* A measure of length, mentioned by Vitruvius, twenty feet in length, and used for measuring land. Millin, however, makes it a species of level with two weights, used for the purpose of ascertaining falls of rivers, aquæducts, &c.

CHRYSOBERYL. [Χρυσοβήρυλλος, Gr. *chrysoberyllus*, Lat.] *In gem sculpture.* A precious stone of a pale green colour, resembling the beryl and aquamarine, and much paler than chrysolite. Its primitive form is a parallelopipedon, nearly similar to that of the chrysolite, and the secondary crystal are not very different. It is scarcely inferior to the sapphire in hardness, and its specific gravity generally 3. 6.

Pliny mentions the chrysoberyl with a few details; but Theophrastus does not mention it under that name. Messrs. Brückmann and Hill, in their observations on the last named author, have collected that he means this gem in his description of the beryl.

CHRYSOLITE. [Χρυσόλιθος, Gr. from χρυσος gold, and λιθος a stone, *chrysolithos*, Lat.] *In gem sculpture.* A precious stone of a yellow colour, intermediate in hardness between amethyst (or quartz) and feltspar. Its primitive form is a rectangular parallelopipedon, and its specific gravity 3. 4. Millin thinks from the description of Pliny, that he means the modern topaz in his account of the chrysolite.

CHURCH. [circe, Saxon, Κυριακή, Gr.] *In architecture.* A building erected for the performance of Christian worship. In the early period of the Christian era, the first Christians were obliged by persecution to hold their religious assemblies in caverns, and other secret places. Constantine released them from this oppression, and gave them some of the ancient basilicas for their churches. This form they adopted in their new buildings, and from this circumstance the earliest forms of Christian churches have been derived. (See BASILICA.) The first that was erected in Rome was by Constantine, in the year 326; the seat of the empire having been transferred to Constantinople. The church of St. Sophia was erected after the model of the ancient basilica of St. Peter, at Rome. This church was rebuilt by Constantius, destroyed and repaired under Arcadius, burned under Honorius, and rebuilt by Arcadius the younger. It was again reduced to ashes under Justinian, who rebuilt it as it now remains, and it was then that cupolas upon pendentives were first constructed. The church of St. Mark, at Venice, was built in imitation of that of St. Sophia, at which time the use of cupolas was first introduced into Italy. (See DOME, CUPOLA.) But the Gothic and Saracenic style afterwards prevailed. See ARCHITECTURE, GOTHIC, SARACENIC, MODERN, and CATHEDRAL.

The two largest and most magnificent churches in Europe are those of St. Peter's at Rome, and St. Paul's, London. Both may be ranked amongst the most considerable works of architecture. BONANNI, a jesuit, has written a comprehensive history of the church of St. Peter, un-

der the title of *Historia Templi Vaticani;* Rome, 1700, in folio. The whole of this astonishing building is composed of the church itself, and a large oval forecourt, four hundred feet long, and one hundred and eighty feet wide. This circuit, called the Piazza di San Pietro, is enclosed by two covered peristyles, composed of three hundred and twenty columns. The roof which covers them is flat, and ornamented with eighty-six statues of saints, more than double the size of life. In the centre of the court, facing the principal entrance of the church, is the celebrated obelisk of Sesostris, which the Emperor Caligula brought from Egypt to Rome, and which was afterwards raised in its present situation, during the pontificate of Sixtus V. by the celebrated architect Domenico Fontana. This obelisk is composed of a single piece of granite, one hundred and twenty feet high without the pedestal, which is nearly forty feet. Its entire weight is estimated at one million of pounds. Many designs were offered to the pope for its removal and reerection, to the number it is said of several hundreds. Fontana, who was at the time without name and reputation, his project, though approved, was ordered into execution under the superintendance of Giacomo della Porta and Bartolemeo Ammanati. Upon Fontana's representations to the pope, that no one could better carry the scheme into execution than he who devised it, those architects were superseded, and the entire management of the work entrusted to Fontana.

On the 30th April, 1586, the removal of this colossal obelisk was commenced. Sixtus on this occasion, after giving his benediction to Fontana, told him his head should be the forfeit if he failed. By the 7th May, the obelisk was prostrate. On the 13th June, it was moved off towards its destination, and on the 10th September following, its reerection was completed. On its completion, Fontana was made a knight of the golden spur, and ennobled. On the base of the pedestal is inscribed, by order of the pope,

DOMENICUS FONTANA.
EX. PAGO. AGRI. NOVOCOMENSIS
TRANSTULIT. ET EREXIT.

The church itself is built in the form of a cross; its length, including the walls, is nine hundred and seventy Roman palms. The width of the arch over the nave, one hundred and twenty-three palms, and the whole width of the aisle, including the walls, four hundred and fourteen palms. Over the centre rises a cupola, constructed by *Della Porta* and *Fontana*, after the designs of Michael Angiola. At the principal entrance is a portico three hundred and fourteen palms long, and sixty wide.

This building was begun under Julius II. by Bramante, in 1513; after which, the most celebrated architects and artists were successively employed, as Giuliano Sangallo, Raffaelle, Antonio Sangallo, Fra. Giocondo Michel Angiolo Buonarotti, Giulio Romano, Pirro Ligorio, Domenico Fontana, Giovanni Fontana, Giacomo della Porta, Carlo Maderno, Luigi Cigoli, Francesco Borromini, Carlo Rainaldi, Giovanni Lorenzo Bernini, Carlo Fontana, Filippo Ivara, Antonio Cannevari, &c. were engaged upon it. Fontana, who composed a work upon this church, supposes that in his time it had already cost eighty millions of scudi. The beauty of the paintings, statues, and monuments, which ornament the interior, correspond with the grandeur and magnificence of the building.

The best works for reference, as to the architecture and description of this church, are, CASTAGUTII, *Architettura di S. Pietro, folio*, Rome, 1684; DUMONT, *Détail d'Architecture de S. Pierre*, &c. 2 vols. folio, Paris, 1763; FALDA, *Veduta di Roma Antica e moderna*, folio, Rome, 1665; D. FONTANA, *Della Transportazione del Obelisco Vaticano e delle Fabbriche di Papa Sisto* V. folio Rome, 1540; CARLO FONTANA, *Descrizione del Vaticano*, folio, Rome, 1644.

After St. Peter's at Rome, St. Paul's, London, is generally allowed the second place among churches, and the first among protestant cathedrals; to attempt a long description of which is unnecessary in this work, as it is so well known, and so many descriptions of it published. It is built in pursuance to an order from the leading men of the day, in the form of a cross. Over the space where the lines of that figure intersect each other, rises a stately dome, from the top of which springs a lantern, adorned with Corinthian columns, and surrounded at its base by a balcony. On the top of the cupola of the lantern is a magnificent ball of copper gilt, surmounted by a bold and handsome cross. This ball and cross has been recently restored in a very scientific manner under the directions of Mr. C. R. Cockerell.

The length of the whole structure, including the portico, is five hundred and nine feet, the breadth two hundred and ninety-six; the height to the top of the cross, three hundred and seventy feet, the exterior diameter of the Peristyle of the cupola, one hundred and forty, and the

entire circumference of the building, nearly two thousand three hundred feet. A dwarf stone wall, supporting a handsome ballustrade of cast iron, surrounds the church, and separates a large area, used as a cemetery, from the spacious carriage way on the south side, and a broad foot pavement on the north. The expense of erecting this cathedral was £736,752. 2*s.* 3½*d.* exclusive of iron railing and gates, which amounted to £11,202 more. The church has three porticos; one at the west entrance, and the others facing the north and south, at the extremity of the transepts. The west front is surmounted with two fine campanile towers; and the whole building is surrounded by a balustrade parapet, surmounted with colossal figures of the apostles.

More detailed descriptions of this church are published in the different accounts of London; and engraved plans, elevations, and sections, from actual measurements, by the author of this dictionary, are to be found in "The Fine Arts of the English School, 4to. London, 1810;" in "Plans, Elevations, and Sections of St. Paul's Cathedral, folio, Lond. 1823, by J. Elmes, M. R. I. A. Architect; and an account of its erection, &c. in the Life of Sir Christopher Wren, by the same author, 4to. Lond. 1823."

Churches have been divided into seven different species, *pontifical*, or where a pope governs in person, as at St. Peter's at Rome; *patriarchal*, of a patriarch, like St. Mark's at Venice; *metropolitan*, or of an archbishop, as London, Canterbury, and York; *cathedral*, of a bishop, like those of every city in England; *collegiate*, of a college; *parochial*, belonging to a parish; and *conventual*, belonging to a convent.

The interior of churches are generally divided into the portico, the nave, the aisles, and the choir. The porch or portico is the same as of any other building; the nave is the large central part, in which the congregation assemble; the aisles are side walks, usually for access to the other parts of the church; and the choir is the part where the service is performed. The altar is generally placed at the east end of the choir, and surrounded by a balustrade raised on steps. See Altar.

In churches erected for the service of the protestant religion, in which preaching forms a striking feature; gaiety, splendour, and magnificence of ornament are inappropriate and unbecoming. A dignified simplicity and subservient decoration should be strictly attended to. The building should be well lighted, the preacher should be placed in a situation visible to all the congregation, and it should be constructed according to the laws of acoustics. The Grecian Doric, or simplest of the Ionics, are the most proper orders for this purpose. On the building of churches in general, the following works may be consulted. The fifth book of *The Architecture of* Sebastian Serlio; the fourth book of that of Palladio; the sixth and seventh chapters of the third volume of *Cours d'Architecture de* Blondel; *Elévation du Portail, Coup, Profil, et Plan d'une Eglise paroissialle, par* C. Dupin, folio; *Eglises et Autels, par* Neufforge, folio; *Aigle; ou, Lutrin pour un Chœur d'Eglyse, par* De la Fosse, in folio; *Plan et Elévation d'un Chœur d'Eglise, par* Corneille; *Nouveaux Dessins d'Autels et de Baldaquins, par* Pineau, folio; *Divers Dessins pour Tabernacles, Autels, Epitaphes, par* Rudolph, folio; a work in German, by Schubler, upon the ornaments of churches; and a work in the same language, by Fæsch, upon altars. Britton's *Cathedral Antiquities*, &c. &c. Upon the history of church architecture, the following works are among the principal:—*L'Histoire des Temples des Païens, des Juifs, et des Chrétiens, par L'Abbé* Ballet, Paris, 1760, 12mo.; *Histoire de la Disposition et des Forms différentes que les Chrétiens ont données à leurs Temples, depuis Constantin-le-Grand jusqu'à présent, par* M. Le Roi, Paris, 1764, in 8vo.; *Delle Basiliche antiche, e Specialmente di quella di Vicenza dal C. Enea* Arnaldi, Vicenza, 1767, in 4to. with engravings; *Temples anciens et modernes; ou, Observations historiques et critiques sur les Monumens d'Architecture grecique et gothique, par* M. L. M. London, 1774, 8vo.

Ciborium. [Lat. Κιβώριον, Gr.] *In architecture.* An insulated building, composed of an arched vault supported on four columns. The name is probably derived from the Greek Κιβωτὸς an arch. It is also the name of the coffer or case which contains the host in the ceremonies of the church of Rome. The tomb of a martyr, when sculptured and used as an altar, is also called a ciborium; and in Italy, any insulated tabernacle. Ciboriums are erected in Catholic countries on tombs and altars, sometimes several in the same church; but they are more often confined to the ornamenting of the grand altar. The ciborium which Justinian built in the twelfth year of his reign, when he rebuilt the church of St. Sophia, is spoken of by contemporary writers as exceeding any thing then witnessed for splendour and elegance.

Cieling. [from *ciel*, Fr.] *In architecture.* The top of a room; the inner roof of a building. The cieling is generally formed on the under sides of the joists or rafters, with laths and plaster. In public rooms and elegant houses, the cieling is often decorated with sculptural ornaments in stucco, and painted. Painted cielings in the French manner, as seen in many houses built about the time of Charles II. are now but little used, owing perhaps to the small size of our houses, and a better taste for the beautiful in art, which does not relish those walls and cielings

"Where sprawl the saints of Verrio and La Guerre."

The custom of painting cielings, vaults, and cupolas, has however, given birth to some of the finest works in art; and the greatest architects, as Jones, Wren, Bramante, Palladio, Vignola, De l'Orme, Lunghi, Borromini, &c. have employed the pencils of Rubens, Thornhill, Zucchero, Pellegrini di Tibaldi, Primaticcio, Lanfranc, Pietro di Cortona, Vouet, Bourdon, Mignard, &c. in decorating their cielings. Among the finest works of this description are the cielings in Whitehall Chapel, by Rubens; the cieling of the hall, Greenwich; the cupola of St. Paul's, London; the cielings of Montague House, now the British Museum; the cieling of the council room in the Royal Academy, painted by West, Angelica Kauffman, and other eminent artists; the library of the same institution, by Sir Joshua Reynolds; and many others in England. And on the continent, at Versailles, Fontainebleau, Paris, the church at Todi, the palaces of Caprarola, Pitti, the Thuilleries, the Luxemburgh, the church of the invalids at Paris, &c. the celebrated loggia at the Vatican, by Raffaelle; the Villa Albani, by Mengs; the cupola at Parma, by Correggio; the Institute at Bologna, by Tibaldi, &c.

The painter of cielings should possess great knowledge in perspective and foreshortening, a boldness of style, and a vigour of execution, a brilliancy of light, a depth and boldness of shadow, fitting for the distance and situation from which they are to be viewed. If the ground or substance of the cieling is fit for it (that is, if it is of plaster), painting in fresco is to be preferred before all others for this purpose; but if it is on boards or on canvass, distemper is then better; but either is preferable to oil colours for this purpose, although much used. See Fresco, Destemper, and Painting.

Cima. See Cyma.

Cimetery. See Cemetery.

Cincture. [*cinctura*, Lat.] *In architecture.* A ring or list at the top or bottom of a column; it represents a ferule or hoop of metal, anciently used in wooden columns to keep them from splitting. See Colarino.

Cinerarum. [Lat.] *In sculpture.* A vessel made to hold the ashes of the dead; from whence a building erected to hold them has also been called by the same name.

Cinnabar. [*cinnabari*, Lat. Κιννάβαρι, Gr.] *In painting.* An ore or sulphuret of Mercury, consisting of that metal united with sulphur. Artificial cinnabar, or vermilion, is a colour used by painters, being a vivid red, but dries very slowly.

Cintre. [Fr.] *In architecture.* The timber framing erected in apertures between piers, to support voussoirs or materials of an arch while building, till they are keyed in and otherwise rendered secure, when they are taken away. Cintres should always be formed of the exact shape of the intended arch, groin, &c. convex as that is to be concave. They should always be also of a strength more than sufficient to bear the weight of the intended arch. For a mathematical account of the best cintres see the article Bridge in the Encyclopædia Metropolitana.

Cippolino [Marble]. See Marble.

Cippus. [Lat.] *In archaiology.* A small gravestone. Among the ancients the cippus was generally a small column, sometimes without a base or capital, and its greatest ornament an inscription, which preserved the memory of some event, or the remembrance of some deceased person. They were used by the ancients for several purposes, as marking distances. These were the miliary columns, sometimes having the names of roads, serving as directing posts, sometimes marking the boundaries, with inscriptions indicating the consecrated grounds for burial of particular families. The form and ornaments of those last mentioned have often caused them to be mistaken for altars. They were consecrated to infernal deities, and the manes of the deceased. The upper part was often hollowed into the form of a cup, like the upper part of certain altars. When the ancients traced the enclosure of a new town with the plough, they fixed cippi from space to space, upon which they first offered sacrifices; they afterwards built towers in their places. Cippi are often represented upon medals, and engraved gems, and are always placed near some divinity, who are supported by them, and generally bear some symbolical

figures. They were of varied and elegant proportions.

The British Museum, in their department of antiquities, have some fine ones, one of which has an inscription to Viria Primitiva; and another, which appears never to have been used, a blank space being left for the name. There is another in the same collection also without a name, on the front of which is represented, in fine sculpture, two birds perched on the edge of a vase, out of which they are drinking, beneath a festoon composed of fruits and foliage, suspended from two bull's sculls. Another of them has an inscription to M. Cælius Superstes; another to T. Claudius Epictetus; another to Claudia; a very large one, with an inscription, to M. Clodius Herma, Annius Felix, and Tyrannus; another to Agrusi Agatha; besides several without inscriptions.

Circle. [*circulus*, Lat.] *In all the arts.* A geometrical figure used in the arts; it is a plain figure, bounded by a single line, which is curved, and called the circumference or periphery, and to which all the right lines which can be drawn from a point in the middle of it, called its centre, are equal.

Circle (Mythic). See Mythic Circle.

Circus. [Lat. Κίρκος, Gr.] *In architecture.* An open space or area for sports. Among the Romans the circus was a long narrow building, whose length to its breadth was generally in a proportion of five to one, and resembled, in its form and usages, the stadia of the Greeks. The *circus* was divided down the middle by an ornamented barrier called the *Spina*, and enclosed at one end by the *carceres*, or starting place; while the *stadium* was clear in the middle and open at one end. See Stadium.

These buildings were used for the celebration of games, horse and chariot racing, gladiatorial combats, combats of wild animals, and sometimes for making harangues to the people. Those who wished to excite the popular feeling against their governors often took the occasion of the circurian games to accomplish their object.

In the earliest period of the Roman history, Romulus established courses and public games, in honour of the god *Consus*, and called them *Consualia*. It was at the celebration of one of these games that the famous rape of the Sabine women took place. They were celebrated annually on the 15th of the ides (18th day) of August. In the end they took the name of *ludi circenses*, from *circum* and *ensis*, as the chariots and horses in running their career, described circuitous lines in turning the *meta* or goal; and the building in which they were celebrated was called, from the same reason, *circus*. The games were called Ludi, from the Lydians, of whom the Romans borrowed them.

The first circus of stone was erected by *Tarquinius Priscus*, after his defeat of the Latins. It was three furlongs in length, and was called *Circus Maximus*, and *Hippodromius*. Julius Cæsar improved and adorned it with stately and sumptuous buildings, and supplied it with channels of water called Euripi, after the straight sea between Greece and Negropontis, for the purpose of occasionally using it for naumachiæ or naval combats. Its situation was between the Palatine and Aventine mounts. All the *curiæ*, or divisions of the people, as established by Romulus, had their proper places assigned to them. The lower orders were separated from the rest; the nobles, the gentry, and magistrates were seated according to their quality. The nearest and most convenient place to the shows was the *orchestra*, which was assigned to the senators and persons of the noblest quality. Before it was a large platform called *podium*, where the throne of the emperor was usually placed, and was also appropriated to the nobles and foreigners of the highest distinction, the senate, the tribunes of the people, the vestal virgins, and the person who appointed the games and paid the expenses. He was styled by the various names of *Editor*, *Munerarius*, *Agonotheta*, and *Brabeuta*; as publisher or declarer of the sports and their conditions, as the giver of them at his own expense, as judge of the victors, and as distributor of the prizes. And the prize that was bestowed upon the victors was called *Brabium*, or *Brabeum*, from Βραβιον, premium.

In the beginning of the Roman empire kings were always the *agonothetæ*. Afterwards the office devolved upon the *prætor*, but if absent a *dictator* was employed for this purpose: and when the empire was arrived to its highest grandeur, not only the emperors, but also the consuls and other magistrates gratified the people with such kind of sports at their first admittance into their offices.

The Romans were so extravagantly fond of these practices, that they spent days and nights in seeing them without caring for eating or drinking. It is true, however, that they who gave these sports did also occasionally feast the people. The popular outcry of *panem et circenses* is celebrated in their history.

[illegible]

the 20th day of September. The Lud Venerales, dedicated to Venus, on the anniversary of the raising of the Roman temple, was commemorated on the 19th of the 10th day of August; with the Nonilunia on the 9th of the 10th day of July. The Lud Romanorum was performed every hundred years, during three days, in honour of Dianus and of Juno. The young virgins and men were wont at this time to offer incense to Juno. They were also called Lud Tarentini, after a place in Rome. Dianus seems to be equal to Janus. The Lud Plebeiorum were instituted in honour of the people, for the remembrance of the better sense of the people and the senate. The Lud Saeculares were performed in the evening, and in other ordinary places in honour of Dedo Quirin, or Jove-Mill gods. Pomonus Lud were so called from the place. The ancients prayed unknown, they were so ashamed. The Eterni Lud, called also Tiberius and Sacrio Lud, were instituted in honour of the infernal gods, or the Lud Terpentina, in remembrance of a great plague that happened in the reign of Tiberius, that ceased, and lasted until. The Lud Ferali were yearly celebrated in the Roman magistrates, in honour of a great plague, which had consumed the citizens and their cattle. The cow was put in victims, and fired in the ashes of the god with wine, which was called Aemon-Ium; including the pontiffs, the sacrificers, Dianus to explore the victim.

These plays and games, perhaps were sometimes kept in the cities, near the walls of Rome, and were therefore called Lud Circenses, in which there be the most remarkable particulars: Pompa, the stately procession of the Roman gods that were carried upon, and followed by the statues of all the Roman worthies, by chariots, palanquins, horse chariots, carriages, and the spoils of their victories. Sponsores were the wagers that were laid upon the events of the day. Harenae were the contingents of horses or asses, who were divided into four parties: Russatae were white, albatae, Veneta, or Prasinae. Equi were horse-jockeys, or horse-racers, and were distinguished by their four colours. Ad ea ceta the victors were crowned, and a herald proclaimed the names of those who obtained these honours.

Besides these Circenses games there were also hundred days, called Lud scenici, stage plays, and were either tragedies, comedies, and mimes. Histrio, dancers, Pygmaei, or Cucumbi, or as the Romans called them, Pygmaei, because the feet of the actors were naked, dwarfs, or children of parts, a sorts of Lilliputs in Rome; they always the national actors and mimes. These performances are called by Juvenal and others, Pygmaei, because they wear a robe called Pygmaei. Pygmaei, because he wears a gold, Spartan, buckle-lock upon their, or a weight for their purse. Of these Plautus remarks: "Like rat shrew against mus," and Plutarch, as belonging to an band of tumbling tumblers, then Tarentum.

Another large number of the circus have were also among the Romans the and carrying, particularly in the cities of Italy where the value was temporary with a circus, called circus circenses, which was also the name of the principal circus in the city, in Italy, the national circus's name: Ad, and Pompa, Romans, games, related from circumstances of Ludos and Circuses, who brought the Romans and a Pompa Dies, Ea, is, Ibat, is, Ab, Ire, Circuses". In total there were so many and without numbered, Romulus to various sports. Tiberius a regular and that shows from the military exercises of Rome, who was called Pompa, Romanus, and represented, consulting, single combat, and the name of a battle. Their game was named Floralia, Ludorum, Ludi, and Ludi circus, in the honour of Tiberius, he was so entitled.

The principal circuses of ancient Rome were the Circus Maximus, before mentioned, or having were built by Romulus, and enlarged by Julius Cesar. According to Dionysius Halicarnassus it was three miles and a half long, and one mile in width. Augustus made large additions to it, and intended it with an obelisk, which were there in the Phoenician Pyramis, where it was erected by Ramses Pharaoh, in the year 1600, during the pontificate of Sixtus V. Being much disappointed, it was removed under Constantine, and afterwards erected with a second obelisk, which was also removed by Sixtus, in the front of the church of St. John the Lateran, in consideration of the enormous labour in its removal. The number of persons who could witness the public games in the Circus Maximus at one time was according to Dionysius Halicarnassus, one hundred and fifty thousand. Pliny says, that it contained two hundred and sixty thousand persons, and Pacilius Varro two hundred and eighty thousand. These apparently contradictions may be easily reconciled with each very

we consider the various enlargements which took place in this place of public resort, at different epochs of the Roman empire, as its population increased.

The *Circus of Flaminius*, also called the *Circus Apollinaris*, from being situated near a temple of Apollo, was erected in the vicinity of the *Portus Carmentalis* and the *Pantheon of Agrippa.* It was built by the Consul Caius Flaminius, who also constructed and gave his name to the Flaminian way. It was of considerable dimensions, and was very magnificent. Augustus improved and repaired it, and prepared it with water, as a naumachia for a combat of crocodiles. Lucullus also embellished it and ornamented it with arms and trophies taken from his enemies. There are scarcely any ruins left of this once spacious and splendid building. Its space is now occupied by the church and monastery of St. Catherine of the Ropemakers, so called because about a century and a half ago the ruins of the circus was used as a ropewalk. The beforementioned church, by Giacomo della Porta, and the Mattei Palace, by Carlo Maderno, were both built from its august ruins, and there is scarcely a vestige of it left to tell the world the munificence and splendour of its founder.

The *Circus Agonalis* or *Alexandrinus* was built by the Emperor Alexander Severus, near to his baths in the place now called the Piazza Navona. It was a spacious and costly edifice, and in the early days of the Christian history is stigmatized as being the scene of the martyrdom of St. Agnes.

The *Circus Sallustius*, named after Sallust, who built or, at least, restored it, in the time of Julius Cæsar.

The *Circus Floralis*, called also the *Circus Vaticanus*, from its situation, and *Neronis*, from the Emperor Nero, who finished it in a splendid manner after it had been left by Caligula its founder. It was situated near the Quirinal Mount, in the Campus Vaticanus, and is partly covered by the basilica of St. Peter. On the *spina* of this circus was placed the celebrated obelisk which was removed by Domenico Fontana at the desire of Sextus V, to the centre of the Perystile of St. Peter. Tacitus (Annal. lxv.) says, that Nero took pleasure in witnessing the torture of the early Christians, whom he ordered to be butchered in this circus. There was also another circus built by Nero in the gardens of Domitia, his aunt, near the mausoleum of Hadrian; and thence called the Circus Domitiæ.

The other circuses which once embellished Rome, as those of Antoninus and Aurelian, the one on the site of the Villa Ludovisia, the circus of Heliogabalus, called by some authors the circus of Aurelian, who repaired it, and some others are no longer even in ruins; except their foundations be concealed under the accumulated mass of ancient ruins on which the papal city stands. Some authors also speak of another circus which was situated near the gate of St. Sebastian. Panvini thinks its construction may be dated in the time of Constantine. Fabretti attributes it to Gallienus, and Guattani to an emperor who reigned in the latter part of the fourth century.

The principal component parts of a Roman circus were, its enclosing *walls*, the *carceres*, the *area* or *arena*, the *seats*, the *podium*, the *orchestra*, the *spina*, the *meta*, and in some the *euripus*, when used for naumachiæ.

The walls generally surrounded three sides of the circus, and being circular at the end, gave this species of building its distinctive name. The *carceres* were the barriers or starting place for the horses or chariots, as described in the beginning of this article. The *area* or *arena* was the the floor or open space on which the racers ran. It obtained its latter name from the sand or gravel with which it was strewed. The *seats* were ranges of benches on which the people sat. The *podium* was the open place or gallery in front of the orchestra, appropriated to the emperor, the senators, the vestal virgins, the ediles of the people, and other persons of distinction. The *orchestra* was the gallery behind and on each side of the podium, and was set apart for the same description of spectators as the podium, which was but a principal or elevated part of the orchestra, raised for the emperor's throne. The *spina* or spine of the circus was a divisional wall or barrier down the middle of the area, which was often decorated with statues, trophies, and obelisks. The *meta* was a column or pillar in form of a cone, fixed in the centre of the circular end round which the chariots and horses turned. The *euripus* was a channel of water made round the circus, when used for naumachiæ. The best authors to consult on this head after the various descriptions of ancient Rome are Salmasius, *Observations upon Solinus;* the 9th vol. of the *Tresor de* Grævius; and the 5th vol. of Polenus.

Circus, *in modern architecture;* means a circular row of buildings, with architectural decorations like those at Bath and

at Buxton. Where they are segments they are mostly called crescents.

Cist. [*cista*, Lat. Κίστη, Gr.] *In architecture and sculpture.* A case, chest, or basket. Also the name of the mystic baskets which were carried in the processions of the Eleusinian mysteries, and which were presented to the public as objects of veneration. These baskets were originally made of osiers, and when in later times they were made of metal, they were wrought and chased in imitation of wicker work. On antique monuments the cist indicates the mysteries of Ceres or Bacchus. The cist was often delineated on medals and coins, which for this reason were, according to Cicero, called Cistophores. Upon some ancient medals the cist is represented uncovered, and a serpent creeping from its recess, surrounded by a garland of ivy.

According to Athenæus the cistæ which were carried in the Eleusinian processions contained corn, various sorts of cakes, salt, and poppies; to which, says Clemens Alexandrinus, they added pomegranates, ferulæ, and ivy. Various antique cists of metal are preserved in the different cabinets of Europe. There is a fine one engraved in the Museum Kircherianum, of which Winckelmann speaks in his description of the engraved gems of Storch. On the cover of this cist, Bacchus is represented erect, supported by two fauns. The drapery of Bacchus is spangled with stars. Another ancient cist is in the cabinet of G. Visconti, who has given a description of it in the first volume of the Museo Pio Clementino. The bearers of the mystic cists in the Ceresian and Eleusinian processions were called Cistophori and Canephoræ. See Cistophori and Canephoræ.

Cistern. [*cisterna*, Lat. from *cista* a chest.] *In domestic architecture.* A receptacle or reservoir of water for domestic use. When made of lead cisterns are susceptible of various ornaments in bassi rilievi; as armorial bearings, dates, arabesques, &c. Vitruvius gives many directions concerning their construction and management, which, however, belong more to a work on mechanics than on the fine arts. At Alexandria are the remains of the admirable public cisterns that were constructed by the Ptolemys. They were mostly lined with marble, and are supported by lofty columns of the same valuable material. Among the number of remarkable cisterns, must be reckoned the *piscina mirabilis* at Baia, which was two hundred feet in length, and one hundred and thirty in breadth; supported upon forty-eight columns. The great cistern at Constantinople is reckoned one of the most vast and fine that was ever constructed. This immense reservoir is supported by two rows of columns, each row consisting of two hundred and twelve columns, of two feet diameter, disposed in a circular form, and tending like rays to a column in the centre.

Cistophori. [Lat. Κιστοφόρος, Gr.] *In architecture and sculpture.* The bearers of the sacred cists or baskets in the mystical processions of Ceres, Eleusis, and Proserpine. In Muratori's collection of ancient inscriptions, the goddess Isis has the names of Cistophorus and Cistophora applied to her. Among the Greeks the Cistophoræ were selected from the young virgins of noble birth. See Canephoræ.

The same name is also given by Cicero and other Roman authors to coins or medals which were stamped with the sacred cista upon them.

Citadel. [*citadelle*, Fr.] *In architecture.* A fortress or small castle, generally built in the highest part of a city or fortified place; whence supplies and forces could be issued till the last extremity. The most celebrated citadel in the world is, perhaps, the Acropolis or citadel of Athens. (See Acropolis.) It is engraved upon a fine Athenian medal in the Travels of Anacharsis, by the Abbé Barthelemy.

City. [*cité*, Fr.] *In architecture.* A large collection of houses and inhabitants, having a cathedral, and being the see of a bishop. In ancient architecture, the word city generally indicates the original or most ancient part of the town, as distinguished from the additions or the suburbs. Thus the ancient part or city of Theseus at Athens is distinguished from that of Hadrian.

Cities in ancient times were defended from their enemies by walls of huge stones, such as Pæstum, the walls of Tyrius, which Pausanias (ii. 25.) reckoned among the early wonders of Greece, and similar works. Before the wall which surrounded the Acropolis of Athens was built by the Pelasgi, it was protected by a palisade formed of the trunks of trees. The walls of Mantinea, according to Pausanias (viii. 8.), were built of unburnt clay. Those of the city of Gelonus are said by Herodotus (iv. 108.) to have been wholly of timber. See Athens, Asty, Town.

Civic crown. See Crown.

Classic. [*classicus*, Lat.] *In the history of the arts.* Antique authors and artists,

or their works of the first class. Gellius (vii. 13.) defines the origin of this word to have been derived from *classicus*, which originally meant the prime or first class of citizens, "hinc *classicus scriptor*." An acquaintance with the writings of those authors which are called *classic* is indispensable to the artist; as an ignorance of their contents not only abridges the number of the choicest subjects for the painter and sculptor, but will occasion those mistakes in chronology, costume, and character, that so often disfigure the works of many of the greatest painters.

CLASSIFICATION. [from class.] *In criticism and the history of the arts.* An arrangement according to some stated method of distribution. In order to obtain a proper classification in any department of the fine arts, it is necessary that the person attempting it should be possessed of a methodical mind, and an extensive knowledge of the subject which he proposes to submit to his arrangement; that he may place them each in its proper department. The science of method is therefore of primary utility, particularly in the fine arts; "in which," as an able writer in the Encyclopædia Metropolitana justly observes, "certain great truths, composing what are usually called *the laws of taste*, necessarily predominate; but in which there are also other laws, dependant on the external objects of sight and sound, which these arts embrace."

Paintings should be arranged first as to schools, and then according to the chronological order of the masters; statues, bassi rilievi, and engraved stones, after the various divisions of history and mythology; medals in the order of the countries where they were struck, and the princes whose head and superscription they bear; antique monuments and buildings, at first according to the people to whom they belong, and then according to their various classes, orders, and subdivisions. See ARCHAIOLOGY, MUSEUM, CATALOGUE.

CLEOPATRA. [Κλεοπάτρα, Gr. i. e. *gloria patriæ.*] *In archaiology, painting, and sculpture.* A celebrated Queen of Egypt, whose history is well known. The name of Cleopatra is given by antiquaries to many ancient statues, which have a serpent either in their hands, or added as an accessory. A celebrated statue, now in the Vatican, passed for many years as a Cleopatra, from the circumstance of its having a small serpent entwined round one of its arms. It is now acknowledged, and its expression proves it, that the supposed asp is a bracelet of the sort called *Opheis* among the Greeks, and that the dying Cleopatra, is Ariadne asleep on the rock of Naxos. See ARIADNE, BRACELET.

CLEPSYDRA. [Lat. Κλεψύδρα, Gr.] *In architecture and archaiology.* A vessel or building measuring time by the running of water or of sand. The former was a sort of hourglass by which orators and pleaders were allowanced to time, much used by the Greeks; introduced among the Romans by Pompey, after his third consulate; whereas before that period any one might speak as long as they pleased.

The most celebrated building of this kind is the octagonal temple of Andronicus Cyrrhestes, commonly called the tower of the winds. This ancient monument is situated to the eastward of the Agora. Varro is the oldest writer who has described this building, which he, as well as Vitruvius, calls an horologium. Mr. Wilkins, in his Atheniensia, thinks that this building, which he compared on the spot with his author, corresponds so correctly with the account given by Vitruvius, that no doubt can exist of its identity with the subject of his description. The earliest buildings erected for the purpose of measuring time were dials which showed the hour when the sun appeared; but in winter, when the sun was sometimes obscured, the lapse of time could no longer be indicated by such expedients, and the passing hours were marked by means of a machine, worked by a constant and equable supply of water. See WILKINS's *Atheniensia;* STUART's *Athens;* VITRUVIUS; VARRO.

CLIMATE. [*clima*, Lat. Κλίμα, Gr.] *In criticism and the history of the arts.* A space upon the surface of the earth, measured from the equator to the polar circles; in each of which spaces the longest day is half an hour longer.

On the subject of the climate, as far as concerns the genius of the fine arts, the French and German critics are inclined to be very fanciful. With them, le ciel triste et pluvieux of England can never foster genius in the arts. The fine sky of Italy, Greece, Germany, and France alone can develope its full powers, and the banks of the Thames must be from its fogs and damps, the modern Bœotia. Nous verrons. The arts are however settling on its banks, and England, in spite of Du Bos and Winckelmann, will add the genius of the fine arts to the plume of the Britannic Minerva.

In architecture, however, the affair of climate has a positive and visible effect. The high northern latitudes have produced

the lofty roof to shield and protect the building from their snows and frosts, the long and pointed window, the lofty arch, the elevated pinnacle, the pointed spire, the perpendicular and aspiring style, of the northern architecture, misnamed Gothic. The genial clime of Greece allowed the flat roof, the low tympanum of the Parthenon, and other Grecian temples. The more austere climate of Rome demanded more lofty roofs, and their fastigii are consequently of higher proportions. So much did fashion follow necessity, that Cicero complains, that if a Roman architect was employed to erect a Capitol in heaven, where it never rains, he would erect a roof, and its symbol a pediment. Climate forms the original style of architecture in every country, as may be seen in examining its details and comparing its first principles with the exigences of the people and of the climate.

The subject of climate should be studied and attentively observed by the architect; and particularly the effects of the vicissitudes of the seasons upon its materials.

Cloaca. See Sewers.

Clock-tower. See Steeple, Campanile.

Cloister. [claurten, Sax. *claustrum*, Lat.] *In architecture.* A peristyle or piazza for retirement in a religious house. Under this name are embraced the arcades or piazzas which are erected about an enclosed spot of ground, used sometimes as a garden and sometimes as a cemetery. Their use is to furnish shade and shelter for exercise and reflection, and should accordingly communicate on all sides with the main buildings to which they belong. In the greater part of the principal religious edifices, the cloister is generally the next feature after the church or cathedral to which it is attached, and is embellished by sculptural monuments and other memorials of the dead. In Italy they are richly decorated with marbles and splendid incrustations. In England the principal cloisters are of the pointed or Gothic style of architecture, like that of Westminster Abbey and many of our most beautiful cathedrals. In Italy they are often arcades, supported on piers or columns of various orders of architecture. The most celebrated are those of the Chartreux at Rome and Naples, that of S. Giorgio Maggiore at Venice, by Palladio, and those of the Annunziata and Santa Maria Novella at Florence.

Club. *In the archaiology of painting and sculpture.* The most usual attribute and often the symbol of Hercules (see Attribute). Montfaucon in his *Supplément de l'Antiq. expli.* plate 10, gives the representation of an altar dedicated to Hercules, on which is sculptured in relief a club without knots, the handle of which has bands round it to prevent it slipping through the hand. The club of Hercules is as renowned in mythology as the caduceus of Mercury. On an engraved gem in Stosch's collection, Hercules is represented clothed in a lion's hide, forming a club from the trunk of an olive tree. On a sardonyx of the same collection, the club of Hercules terminates like a caduceus; the artist alluding to the tradition that Hercules dedicated his club to Mercury. This weapon is also given by ancient artists and writers to Theseus, who, as the avowed imitator of Hercules, is generally represented as fighting with a club, and bearing on his arm the skin of a lion instead of a shield. Theseus is thus represented on two of the sculptures of the Phigaleian marbles at the British Museum, one of the clubs, which was of bronze, is wanting, the other sculptured in marble, is knotted. He is also described as being thus armed, and in imitation of Hercules, by Diodorus Siculus (lib. iv. c. 59.) and by Plutarch in his life of Theseus (Vit. Thes. viii).

Cupid is also occasionally represented, on various sculptured gems, with the club, to intimate his victories over the son of Alcmena. Bacchus, fauns, and satyrs may also be seen in ancient sculptures, armed with this rude weapon. See Caylus, Montfaucon, Millin *Dic. Mythol. et Monumens inédit.*

The club was also a weapon used by the ancient Germans, and in the sculptures of the Trajan column, the Dacian soldiers are armed with clubs.

Cock. [cocc, Saxon.] *In archaiology.* The male of the domestic fowl. The emblem of Minerva, on account of his vigilance and his bravery. In mythologic history Alectryon or Gallus, the former being the Greek, and the other the Latin name for this bird, is related to have been the especial favourite of Mars, and so entrusted by him, that he made him guard in his nocturnal interviews with Venus, lest Sol should surprise them. On one of these occasions he fell asleep, and not giving the alarm at the approach of Sol, he discovered the guilty pair, and informed Vulcan, who covering them with a net of chains, exposed them to the derision of all the gods. Mars in revenge changed Alectryon into a cock, who, say the My-

thologists, remembering his fault, always gives notice, by crowing, of the approach of the God of day.

The cock is also an attribute of Mars, and is represented by the side of the heads of that God, on the medals of Metapontum, and on the copper coins of the family of the Volteii. It is also struck as the reverse to figures of Pallas on the medals of Anxur, Aquinum, and Calium in Italy. Pausanias mentions having seen in the citadel at Elis a statue of Minerva, the helmet of which was ornamented with the figure of this bird. He also relates that Idomeneus was represented with a similar emblem upon his shield. Apollo has sometimes this bird, as an emblem, because by its crowing it announces the rising of the sun. Plutarch says that this daily event should be announced by a trumpet in war, and by the bird of Minerva in peace. It was also dedicated to Mercury as a symbol of that vigilance and early rising which are so essential to the success of commerce. It was also sacred to Esculapius. To announce the termination of any serious malady, the convalescent sacrificed a cock to the god of medicine. Socrates when dying ordered one to be sacrificed to that deity. The Romans used a sort of divination by this bird, which they named after its Greek appellation, *Alectryomantia.*

CŒMETERY. See CEMETERY.

CŒNACULUM. [Lat.] *In ancient architecture.* According to its etymology and to the best authorities, the cœnaculum is properly the eating or supper room of the ancient Romans. But in the early times of their history, when their houses consisted rarely of more than two stories, the upper story was called by this name. It was also used for lodgings let out for hire, and for the upper stories of the Roman circuses, which were generally divided into small shops or rooms, which were let for hire by the censors for the advantage of the public treasury.

CŒNATIO. [Lat.] *In ancient architecture.* An apartment in the lower part of the Roman houses, or in a garden to sup or eat in. Or, according to Suetonius, a banqueting or summer house. Pliny describes in his elegant epistles, a spacious eating room (Cœnatio) in his Laurentinum, which was situated in the superior part of a lofty tower. The Romans had cœnationes for the different seasons of the year, with different aspects and decorations.

COFFER. [coffe, Saxon.] *In sculpture.* A chest or case to keep money, jewels, and other valuable commodities of small dimensions. Coffers are articles of taste, susceptible of great decoration, and may be rendered elegant as well as costly appendages to a splendid apartment.

Among the most ancient as well as the most celebrated monuments of Grecian art, may be reckoned the coffer, or, as it is sometimes called, the chest of Cypselus; in which he was preserved by his mother Labda, from the fury of the Corinthians, when the oracles had foretold that he would become the tyrant of the kingdom. The leading people thereupon sent ten picked men to slay him, but the smiles of the infant disarmed them. Afterwards, fearing the blame of their commanders, they entered the house again for the purpose of executing their commission, but his mother had concealed him from their rage; according to Herodotus in a heap of corn, but according to Pausanias and others, in a coffer or chest.

This coffer was afterwards consecrated by the Cypselidæ in the temple of Juno at Olympia. It was formed of costly materials, and beautifully embellished with sculptures. The description of its form and workmanship is given by Pausanias, and has furnished the materials for a learned dissertation upon it by M. HEYNE.

The subjects of the sculptures which embellished its sides and cover were, on one of the smaller sides, first the race between Pelops and Œnomaus, the father of Hippodamia. They are represented each in his bigæ; the horses of Pelops being winged as indicative of their fleetness. Pelops is holding his bride Hippodamia in his arms. This celebrated chariot course (where thirteen suitors lost the race, their bride, and their lives, till the treachery of Myrtilus, the charioteer of Œnomaus, procured the victory for Pelops), was a favourite subject with ancient artists, and was often represented on their monuments. Among others it formed the subject of the bassi rilievi on the tympanum of the pediment to the temple of Jupiter at Olympia.

The second subject is the departure of Amphiaraus for the Theban wars, which he absented himself from, having been foretold that he should never return. He concealed himself for a time, but his wife Euriphyle, at the persuasions of her brother Adrastus and Polynices, two of the leaders, and the bribe of a chain of gold, told where he was hidden. He departed, and lost his life, first commanding his son Alcmæon to slay his mother in revenge of

his death. In this compartment the scene is represented before the house of Amphiaraus, before the door of which stands an aged female with his infant son Amphilocus in her arms. Near to her is Euriphyle holding the golden reward of her treachery in her hand, and by her side stands her son Alcmæon and her daughters Eurydice and Demonassa. Amphilaus himself has one foot placed in his chariot, and turning round with a sword in his hand, seems to threaten her treachery with his vengeance.

The third compartment represented the games and combats instituted in honour of Pelias. The fourth, Hercules conquering the Lernian hydra. The fifth, Phineus, King of Arcadia, blind and tormented by the harpies; Zethes and Calais, two of the Argonauts, and sons of Boreas his wife's brother, chasing them away and destroying them.

The second side, which was one of the longer ones, contained the twelve following subjects; namely—First, Night under the figure of a woman, is holding in her hands death and sleep, figured under the resemblances of a black and a white boy. Second, *Dice* (Δικη) the virgin daughter of Jove, and goddess of justice, punishing *Adicia* (Αδικια), or injustice. Third, two females, probably Medea and one of the daughters of Pelias, compounding magical herbs. Fourth, the carrying away of Marpessa, daughter of Evenus King of Etolia, by Idas a son of Neptune. Fifth, Alcmena receiving presents from Jupiter, under the form of her husband. Sixth, Menelaus threatening Helen with death after the siege of Troy. Seventh, Medea and Jason seated and attended by Venus. Eighth, Apollo and the Muses. Ninth, Atlas supporting the heavens, and holding the apples which Hercules is demanding of him. The representation of Hercules is remarkable, as he is armed with a naked sword instead of his club. Tenth, Mars armed carrying away Venus. Eleventh, Thetis and Peleus, the parents of Achilles. Thetis, according to the mythologists, assumed various frightful shapes to avoid the importunities of Peleus. In this bassi rilievi, she was represented as under the transformation of a serpent, slipping through the hands of Peleus the moment that he would have embraced her. Twelfth, Perseus pursued by the Gorgons, who were represented with the extraordinary addition of wings.

The third series, which appears to have been upon the cover, represented a combat between soldiers on foot and in chariots, some of which appearing to recognise each other, are embracing. According to Pausanias, it represented the Etolians under the command of Oxylus, attacking the ancient Eleans.

The fourth, which was the second long side, had also twelve subjects; namely,—First, Boreas, who is represented with his lower extremities terminating in the tail of a serpent, carrying away Orithya, daughter of Erectheus King of Athens, with whom he was in love, by force. Second, Hercules conquering Geryon. Third, Theseus with a lyre, and Ariadne holding a crown. Fourth, Achilles and Memnon combatting with Achilles; near to whom are Thetis and Aurora, their mothers. Fifth, Melanion and Atalanta the daughter of Jasius, with a fawn. Sixth, the combat between Hector and Ajax, fomented by Discord, who is between them. Seventh, the Dioscuri, Helen and Æthra. Eighth, the battle between Agamemnon and Coon over the dead body of Iphidamas. On the shield of Agamemnon is represented a figure of terror with the head of a lion. Ninth, the judgment of Paris, near whom is a winged Diana with a panther and a lion. Tenth, Ajax carrying away Cassandra. Eleventh, Polynices the son of Œdipus, killed by his brother Eteocles. Near to whom is the terrible KHP, or personification of the inevitable destiny of death. Twelfth, the bearded Bacchus, clothed with a tunic, which Visconti thinks is the Indian Bacchus or Sardanapalus. He is holding a vase of gold in his hand, and near to him are vines, apple-trees, and pomegranates.

The fifth portion, or second small side, had upon it the five following subjects. First, a female asleep upon a bed in a grotto with a man. Pausanias considers them to be Ulysses and Circe, because there are four servants in attendance, their number and employments corresponding with the story as related by Homer. But Circe, according to the poet, inhabited a palace in a wood, and not a grotto by the sea shore. It is, therefore, more probable that it is Ulysses and Calypso. Second, a centaur, of which the forefeet are those of a man, probably Chiron. See CENTAUR. Third, Thetis receiving from Vulcan the armour which he had forged for Achilles. Fourth, Nausicaa attended by a slave, and drawn in a car by mules. Fifth, Hercules killing the centaurs.

Pausanias does not appear to know who

was the artist that executed this curious and admirable piece of ancient art; but thinks that the inscriptions were the performance of Eumelus the Corinthian, on account of the prosodion which he composed for the Messenians on the isle of Delos. If this conjecture be true, the antiquity of the chest of Cypselus goes back to a very ancient date, for this poet lived about the time of the commencement of the first war of the Messenians, which was about seven hundred and forty-two years before the Christian era.

COLARINO. [*colarin*, Fr.] *In architecture.* The part of a column of the Tuscan and Roman Doric orders, which encircles the upper part like a small collar; it is more properly called astragal. See ASTRAGAL.

COLLAR. See NECKLACE.

COLLATERAL. [*collateralis*, Lat.] *In architecture.* Running parallel to each other. Houses, walls, columns, piers, &c. are said to be collateral, when they are equidistant from each other.

COLLECTION. [*collectum*, from *collectio*, Lat.] *In painting, sculpture, and engraving.* A series of works of art gathered together. A collection of paintings and sculptures is a smaller quantity than what would constitute a gallery, and distributed in the living rooms of a dwelling house. A selection of choice prints are generally termed a collection, whether large or small.

COLLEGE. [*collegium*, Lat.] *In architecture.* An edifice constructed for the residence of collegians, or societies of men set apart for the study of learning or religion; and for the education of youth in the higher branches of study. A college should consist generally of one or more spacious courts, encircled by buildings, devoted to the purposes of study, exercise, recreation, sleep, eating, living, &c.

England possesses, in her two universities of Oxford and Cambridge, many colleges in which every thing that convenience, necessity, and comfort can desire. For their particulars, the reader is referred to any of the numerous histories of these two celebrated edifices.

In Italy there are many colleges, which are remarkable for their arrangement and the beauty of their construction. At Rome the *Collegio Romano de Gesuiti*, built by Bartolemeo Ammanati, is a large and handsome structure. The large quadrangle is one of the finest in Rome; it has two stories of arcades, which serve as porticoes, and is decorated with pedestals, pilasters, and sculptural ornaments. The façade alone remains as designed by its great architect. Among the other principal colleges in Rome that are most worthy the notice of the student are, the Collegii, Clementino, de Neofiti, di Propagandi, and della Sapienza. This last is one of the finest edifices in modern Rome, and is the work of Michel Angiolo Buonaroti, and of Giacomo della Porta. Over its gates is inscribed, "INITIUM. SAPIENTIÆ. TIMOR. DOMINI."

At Genoa there is a magnificent college belonging to the Jesuits, quite in the style of the palaces of that grand city. It was designed by Bartolemeo Bianco, a Lombard architect, for the Balbi family, for whom he also built three others; one of which is now the Durazzo palace, and the other was given by that munificent family to the Jesuits for the purposes of a college and a place of education.

In Paris there are nine colleges, not one of which has any particular merit in its architecture deserving the attention of the student.

Trinity College, Dublin, is a large and handsome building, with spacious quadrangles, gardens, and a park. It has a fine chapel, refectory, and other handsome buildings, by Sir William Chambers, and a very commodious and handsome mansion for the provost.

COLONNADE. [*colonnata*, Ital.] *In architecture.* A series or row of columns. Colonnades are of various forms and dimensions, and assume different names according to their application and uses. When in front of a building, or in the interior of a quadrangle, they are called *porticoes;* when surrounding a building of any shape, *peristyles;* when double or more, as in some of the ancient temples, and the circular peristyle in front of St. Peter's at Rome, they are *polystyle.* No people have made more use of colonnades, or with greater effect, than the ancient Egyptians. Many of their temples being literally thickset, both in the interior and exterior, with colonnades of every description. The Greeks were more simple in their arrangement, and their colonnades were mostly distributed into porticoes and peristyles, both monostyle and polystyle. Their most magnificent example is perhaps the temple of Jupiter Olympius at Athens. Baalbeck and Palmyra present also various examples of splendid colonnades. Of modern works, the magnificent colonnade of the Piazzo di San Pietro at Rome, the work of Bernini, is at once the grandest and most beautiful. It consists of two hundred and eighty columns, and forty-eight

pilasters, of forty feet high, raised on three lofty steps. It is surmounted by a ballustrade, on which are eighty-eight colossal statues of saints, fifteen feet in stature.

Colonnades are among the most beautiful and splendid works of architecture, and in the hands of a man of taste and science, are capable of the grandest and most imposing effects.

COLOSSAL, or COLOSSEAN. [*colosseus*, Lat. from Κολοσσὸς, Gr.] *In all the arts.* Of enormous magnitude, like a colossus or giant in form or size. Every figure, whether in sculpture or painting, that exceeds the size of nature, is colossal. In architecture, which is an art essentially original, and not depending on an imitation of nature, the epithet is less applicable. Yet, when the mind has formed an idea of the size of a house, a church, a temple, or other considerable building, when that is exceeded, it is occasionally employed, as to the Pyramids of Egypt, the Amphitheatres of Rome, and in modern times by some writers, to the basilica of St. Peter's in the same city. The term is, therefore, more appropriate to those works of painting and sculpture where the figures much exceed their natural dimensions.

A taste for the colossal in art distinguishes all the nations of antiquity. The Egyptians, the Greeks, and the Romans have particularly excelled in the number as well as in the perfection of their colossal works. See COLOSSUS, GIGANTIC.

COLOSSEUM. [Lat.] *In architecture.* The name of the largest amphitheatre in the world. This stupendous edifice,

> "Which in its public shows unpeopled Rome,
> And held uncrowded nations in its womb;"

was called the Amphitheatre of Vespasian, or Colosseum, from its magnitude; or as some authors, with less probability suppose, from a colossal statue of Nero, which stood in its neighbourhood. It is also called *the* Amphitheatre, and sometimes the *Flavian* Amphitheatre, but is more generally known by the appellation *Colosseum.* Situated in a valley in the middle of the seven hills of Rome, it rears its lofty head supreme among them all.

It was built by the Emperor Flavius Vespasian, in A. D. 72, after his return from his victories over the Jews, on the site of Nero's gardens and fish ponds. Thirty thousand Israelitish captives are said to have been employed in its construction, which occupied them for five years, at an expense of ten millions of Roman crowns. Vespasian did not live to witness its completion, which took place in the reign of Titus, who finished and dedicated it with due solemnities and forms to his father. The dedication of a theatre by the Romans was celebrated by dramas, or stage plays; of a circus, by horse and chariot races; of a naumachia, by naval shows and combats; and of an amphitheatre, by gladiatorial combats, hunting, and fights of wild beasts. The day on which Titus dedicated the Amphitheatrum Vespasiani, five thousand wild beasts of various species were thus killed; the shows and games lasted a hundred days, and he expended an immense sum of money upon these favourite amusements of the people.

The circuses, theatres, and amphitheatres were divided into three divisions, from the bottom to the top, namely, the *orchestra* for the emperor, the senators, and other personages of the highest rank; the *equestria* for those of the equestrian order; and the *popularia*, which were the highest, and behind the others, for the people. It would accommodate ninety thousand persons sitting, and twenty thousand more standing in various places, who were called *excuneati.*

The colosseum is constructed almost entirely with huge blocks of Travertine marble, and is raised on a lofty basement story. Its exterior consists of four orders, the intercolumniations of which are filled with arcades, piers, and archivolts. The lower order is Doric, the columns attached to the walls; the second Ionic, also of three-quarter columns; the third Corinthian, three-quarter columns; the fourth, or upper, also Corinthian, raised on a lofty stylobate, but of pilasters instead of columns. The form of this vast edifice is elliptical, the exterior circumference of which is one thousand seven hundred and sixty-three feet, the greater diameter five hundred and sixty feet, and the smaller four hundred and sixty, and its height one hundred and sixty. See AMPHITHEATRE, THEATRE, CIRCUS.

COLOSSUS. [Lat. Κολοσσὸς, Gr.] *In sculpture.* A statue of enormous magnitude, whence the Greek proverb κολοσσαῖον το μέγαθος. The practice of executing statues of colossal dimensions and proportions is of very high antiquity. The people of the east, from the most ancient times, have been celebrated for colossal sculpture. The pagodas of China and of India, and the excavated caverns of the east, abound with colossi of every denomination. The Asiatics, the Egyptians, and in particular the Greeks, have excelled in these works. The celebrated *Colossus of*

Rhodes was reckoned one of the seven wonders of the world. This statue, which Muratori reckons among the fables of antiquity, was raised by the Rhodians in honour of Apollo, who, according to Solinus, seemed to delight in Rhodes more than in any other part of the earth, because there is never any day so dark or clouded, but the sun appears to the inhabitants of that island. Besides, they say, that in Rhodes he begot his favourite daughter Rhodia; that he sent down upon it showers of gold, and caused, on his birthday, roses to open and spread.

There are many contradictory accounts in ancient authors concerning this colossal statue of Apollo; but the following, gathered from several sources, is not devoid of interest, though mixed up with much fable. When Demetrius, king of Macedon, the son of Antigonus laid siege to the city of Rhodes, because they would not renounce their alliance with Ptolemy Soter; the Rhodians were so succoured by their allies, and particularly by Ptolemy, that the besiegers were compelled to abandon their enterprise. The Rhodians in recognition of their regard for these services of their allies, and of the protection of their tutelary deity, Apollo, resolved to erect a brazen statue of the sun of a prodigious grandeur. Chares, the disciple of Lysippus, was intrusted with the project. The Rhodians demanded what sum he required to complete the statue of a given size. Upon delivering his answer, they required him to name his price for one of double the size, for which he demanded double the amount of his former estimate. He had scarcely half finished the work when he found that he had expended all the money that he had received for the whole, which overwhelmed him so completely with grief and despair, that he hanged himself. Laches, his fellow countryman, finished the work in the space of three Olympiads (twelve years), and placed the enormous statue on its pedestal. Pliny does not mention the latter artist, but gives all the honour to Chares.

Scarcely sixty years had elapsed before this monster of art was thrown from its place by an earthquake, which broke it off at the knees, where it remained till the conquest of Rhodes by the Saracens in A. D. 684, when it was beaten to pieces, and sold to a Jew merchant, who loaded above nine hundred camels with its spoils.

Strabo, Pliny, and other ancient authors, who lived at the time that the colossus of Rhodes is said to have been in existence; and who could have learned from cotemporaries the truth or falsehood of accounts that were given of it, give as authentic its height at seventy cubits, or a hundred English feet. Other authors, who flourished since its destruction, reports its height at eighty cubits. Pliny also relates other particulars, as that few persons could embrace its thumb; and that its fingers were as long as ordinary statues, which, calculated by the proportion of a well made man, would make its height nearer to eighty than seventy cubits. Perhaps the latter dimension may relate to its real altitude to the crown of its head, and the greater to its altitude if erect. Nor am I aware that any other writer has given this reason for the apparent difference.

The statue was placed across the entrance of the harbour, its feet placed on two rocks, and the Rhodian vessels could pass under its legs. In the Anthology are two epigrams upon this colossus, one of which attributes the work to Chares, and the other to Laches. Strabo, Pliny, and Eustathius, the learned archbishop of Thessalonica, who, in A. D. 750, wrote comments upon Homer, and other ancient authors, in his Dissertation upon the Geographical Writings of Dionysius Periegetes, who flourished in the time of Augustus, agree in attributing this colossal work to Chares, the disciple of Lysippus. Some antiquaries have thought, with great justice, that the fine head of the sun which is stamped upon the Rhodian medals is a representation of that of the colossus.

Of other colossal statues those which were executed by Phidias are among the most celebrated for beauty and elegance of workmanship. They were his Olympian Jupiter and his Minerva of the Parthenon. The virgin goddess was represented in a noble attitude, twenty-six cubits, or thirty-nine feet in height, erect, clothed in a tunic reaching to the feet. In her hand she brandished a spear, and at her feet lay her buckler and a dragon of admirable execution, supposed to represent Erichthonius. On the middle of her helmet a sphynx was carved, and on each of its sides a griffin. On the ægis were displayed a Medusa's head, and a figure of victory. This colossal work was not only grand and striking in itself, but contained on its various parts curious specimens of minute sculpture in bassi rilievi, which Phidias is said to have brought to perfection. Cicero, Pliny, Plutarch, Pausanias, and other illustrious authors of antiquity, in whose times this noble piece of workmanship was in existence, speak of it with unqualified rapture; while the ar-

chitecture of the temple itself and its exquisite sculptures prove the veracity of their asseverations.

His Olympian Jupiter was executed after the ungrateful treatment that he received from the Athenians, when he abandoned the city of his birth, which he had rendered celebrated by his works, and took refuge in Elis. Animated rather than subdued by the ingratitude of his countrymen, Phidias laboured to surpass the greatest works with which he had adorned Athens. With this view he framed the statue of Jupiter Olympius for the Eleans, and completely succeeded even in excelling his own Minerva in the Parthenon. Lucian says, that in order to render this work as perfect in detail as it was noble in conception and outline, he exhibited it, while in progress, to the public view, and concealing himself near it, heard every criticism made by the spectators, and profited by every suggestion which he considered as useful. This colossal statue was sixty feet in height, and completely embodied the sublime picture which Homer has given of the mythological monarch of the heavens.

Phidias, above all other artists, proved the truth of Sir Joshua Reynolds's opinion upon the works of the Greeks, who said, in a conversation recorded by the amiable secretary for foreign correspondence in the Royal Academy (Prince Hoare, Esq.), "I have settled my mind as to this point: when I look at the works of the Greeks, I do not see *Fancy*, I do not see *Genius;* I see PHILOSOPHY," which, he might have added, embraces the essence of them both, and of all the finer qualities of art.

While descanting on the colossi of ancient times, we should not forget the magnificent, and perhaps extravagant, proposal of Dinocrates to Alexander the Great of forming Mount Athos into a colossus of that conqueror; nor of a similar proposal of modern times of sculpturing one of the Alps, near the pass of the Simplon, into a resemblance of Buonaparte.

Among other celebrated colossi of ancient times, historians record as eminently beautiful, that which was executed by Lysippus at Tarentum. It was forty cubits or sixty feet in height. The difficulty of carrying it away, more than moderation in the conqueror, alone prevented Fabius from removing it to Rome with the statue of Hercules belonging to the same city.

Colossi were in use also in Italy before the time of the Romans despoiling their vanquished enemies of their works of art. The Jupiter of Leontium in Sicily was seven cubits in height, and the Apollo of wood that was transported from Etruria, and placed in the library of Augustus at Rome, was fifty feet in stature. The same emperor also placed a fine bronze colossus of Apollo in the temple of that god, which he built near his own palace. The earliest colossus that is recorded to have been sculptured in Rome was the statue of Jupiter Capitolinus, that Spurius Carvilius, placed in the Capitol after his victory over the Samnites; but they soon became far from scarce. Five are particularly noticed; namely, two of Apollo, two of Jupiter, and one of the sun.

There have been dug up among the ruins of ancient Rome a colossal statue of the city of Rome, which was reckoned among the tutelary divinities of the empire. The superb colossi on the Monte Cavallo, called by some antiquaries the Dioscuri, are magnificent specimens of Grecian art; so is the Farnese Hercules, and the gigantic Flora of the Belvedere. Rome possesses several other colossi of admirable workmanship, as the colossal statue of Alexander the Great in the Colonna palace; the rare colossus of Antoninus, in the Palazzi Vitelleschi; the celebrated statue of the Nile; the four statues that surround the splendid fountain and obelisk of the Piazza Navona, the admired work of Bernini. They are personifications of four of the principal rivers in the world; namely, the Ganges, which was sculptured by Fran. Baratta; the Nile by Antonio Fancelli; the Danube by Claude Franc; and the Rio de la Plata by Antonio Raggi: the statue of Jupiter, in the gardens of the Palazzo Doria at Genoa, and other colossal statues of less consequence.

The pride and ambition of the Roman emperors led them to encourage sculptural representations of their persons. Nero was the first who ventured on a colossus of himself, by Zenodorus, but after his death it was dedicated to Apollo or the sun. Commodus afterwards took off the head, and replaced it with a portrait of himself. Domitian, actuated by a similar ambition, had a colossus of himself carved as the deity of the sun.

Among more modern works of this nature is the enormous colossus of San Carlo Borromeo at Arona, in the Milanese territory. It is of bronze, sixty feet in height, and has a staircase into its interior for the purpose of occasional repairs and restorations.

The bronze colossus copied from one of the Monte Cavalo statues, in Hyde Park, London; and a few but little larger than life, of the size that may be termed heroic rather than colossal, such as decorate some of our public buildings and commemorative columns, as those on St. Paul's cathedral, Lord Hill's column in Shrewsbury, the Britannia on the Nelson column at Yarmouth, the Duke of Bedford in Russell Square, Charles Fox in Bloomsbury Square, &c. are all that England can at present boast of in this noble style of art. The four colossal statues at Paris, which are in front of the façade of the palace of the Corps Legislatif, are in good taste, and show great boldness and freedom in the execution. They represent the four greatest legislators of France; Sully, Colbert, L'Hopital, and D'Aguesseau; they are in their proper costume and seated.

Canova's Perseus is also much larger than life, and although a very fine work, belongs rather to the heroic than the colossal.

Colour. [*color*, Lat.] *In painting.* The superficial appearance of bodies to the eye. The tints or hues which are laid upon pictures or drawings, and the materials of which they are composed are technically called colour and colours. The art of colouring, or an agreeable and fit arrangement of tints in a picture is one of the greatest difficulties in the decorative part of the art, and one in which the Venetian school has eminently succeeded. In drawing or water colour painting, as well as in the art of colouring prints, the colours are generally used as transparent washes or tints. In the modern English style of painting in water colours, the tints are laid on opaque or transparent, as required; and in oil painting, except the operation called glazing, with opaque colours. See Glazing.

Columbarium. [Lat.] *In ancient architecture.* A pigeon house or dove cote. *Columbarium fictile*, an earthen pot for birds to breed in. In the cemeteries of the ancient Romans the apertures that were formed in the wall for the reception of the cinerary urns were also called *columbarii*, from their resemblance to the openings of a pigeon house. Numerous representations of these receptacles for mortuary urns may be found in the works of Piranesi, in the Description of the Columbarii of the Freedmen of Livia, by Gori and Bandini; and a good practical example of them in one of the new rooms at the British Museum, which is appropriated to the reception of ancient Roman cinerary urns, which are all deposited as they were originally in proper columbarii. See Urn.

Column. [*columna*, Lat.] *In architecture.* A round pillar. In the earliest periods of the world the column was merely the trunk of a tree, or its imitation in stone used to support the roof. The parts of a complete column are its *base*, on which it rests, its body, called the *shaft*, and its head, called the capital. Columns are used to support the entablature of an order, which has also its proper division. See Architecture, Order, Entablature.

The origin of columns has already been touched upon in the article Architecture; and their varieties are also enumerated under the word Capital. In the most ancient times columns of wood were the most usual, as being the most practicable. Such were the columns of the temple of Neptune in Arcadia, of which Pausanias speaks; and those at Elis, and two at Olympia, of which he states himself to have been an eyewitness. It is also probable that the Phœnician temples had also columns of wood, with timber procured from the forests of Libanum. All that we are acquainted with of the temple of Solomon leads to the same conclusion, both with regard to the Phœnicians themselves and this celebrated temple the work of the architects.

In countries like Egypt, where timber fit for construction is scarce and stone abundant, the latter became the principal material for columns, and those of Egypt are remarkable for the beauty of their workmanship and the durability of their materials. The Greeks used marble of the finest kind for their columns, with which their country abounded; and other nations, the stone or material of their country. The Greeks properly considered the column as an essential part of the architecture of their temples, and never used it as a mere decoration.

The manner of constructing the columns of all the orders are upon similar principles. They are all divided into three primary parts or divisions, the *base*, the *shaft*, and the *capital*, except the Doric order, which has no base. The lowest or thickest part of the shaft is used by architects as the universal scale or standard whence all the measures which regulate and determine heights and projections are taken; and this standard or scale must be understood before any architectural design can be commenced.

The universal architectural scale *is* and is *called* a diameter, being the diameter of the lowest or largest part of the column; and unlike the foot, inch, or yard, is as various as are diameters of columns. The diameter, of course, implies the chord of the circle, which forms the bottom of the column. Half of this diameter, or the length of the radius which forms the circle, is called *a module*, and is used as well as the *diameter*, as a primary standard of mensuration, by some writers upon architecture. These measures of length are subdivided as follows; namely, the diameter into sixty parts, and the module into thirty parts, each part being the same in length, and are called minutes. Both mensurations are the same, only under different denominations; as, for instance, one author says a column, which always includes the base, shaft, and capital, is six diameters, twelve minutes high, while another would say of the same column and its admeasurements, that it is twelve modules, and twelve minutes, both meaning the selfsame dimension.

The *Doric* column has no base. The *Ionic* column has one peculiar to itself, called the attic, which with those of the *Corinthian* and *Composite* orders are fully described under the article base. See Base.

The *shafts* of the different orders differ in height, and even in various examples of the same order; as may be seen in the articles Architecture, Order, Shaft.

The *capitals* are also as various, and are fully discussed under that word. See Capital. The arrangement and distribution of columns are explained in the article Intercolumniation, and their contours under that of Entasis. Columns are either plain or fluted, and the flutes and manner of dividing them are different in the Doric and Corinthian orders. The Ionic flutes much resemble the Corinthian, and, in many instances, are exactly similar. Twisted, spiral, and rusticated columns, like many of Mr. Nash's in the New Street, of Borromini in various buildings in Rome, and the Baldachino of St. Peter's, are alike in bad taste, and to be avoided.

Columns are also often used for monuments, as well as for architectural supports; like the Trajan and Antonine columns at Rome, and that called *the Monument* at London. There are also *astronomical columns*, like that which Catherine di Medici erected at the *Halle au Bled* in Paris. The Romans had their *columna bellica*, which was near the temple of Janus, and from which war was proclaimed by the consul casting a javelin from it towards the country of their enemy; also *chronological columns*, whereon they inscribed historical events according to the order of time. The *cruciferal column* carries a cross upon its summit; the *funereal column* an urn; the *statuarial column* a statue; the *zoophoric column* an animal; the *genealogical* or *heraldic column* inscriptions relative to the genealogies or armorial bearings of distinguished families; the *gnomic column* has lines and figures, pointing out the hours on its shaft; the *honorific* or *commemorative column* has for its object the commemoration of great men who have died for or have served their country in a distinguished manner; as those of Julius Cæsar and of the Emperor Claudius, which were formerly in the Forum Romanorum; the *itinerary column* served to point out the various roads diverging from its site. The Romans had also a *lacteal column*, which was erected in the vegetable market, and contained in its pedestal a receptacle for infants that were abandoned by their parents; see Juvenal, Satyr VI. v. 601. The *legal column* was one on which the ancients engraved their laws; the *limitative* or *boundary column* marked the boundary of a state or province; the *manubial column* was ornamented with trophies and spoils taken from the enemy; the *rostral column* with the prows (rostra) of the ships obtained in a similar manner. The first column of this description was that which was erected in the capitol, on the occasion of the naval victory which Caius Duillius obtained over the Carthaginians. It is now on the balustrade of the grand staircase of the Campidoglio. Augustus raised four, decorated with the prows of the vessels which were taken from Cleopatra. Two were also erected to the honour of Caius Menius for a naval victory over the Latins and Antiates. The *sepulchral column* was one elevated upon a sepulchre or tomb, with an epitaph engraven upon its shaft. The *triumphal column* was one erected by the Romans in commemoration of a conqueror to whom had been decreed the honours of a triumph. The joints of the stones were concealed by crowns obtained by military conquests. The columns of Trajan and Antonine, besides their specific objects, are also triumphal columns. The British parliament, when they voted the magnificent palace of Blenheim to the great Duke of Marlborough, also erected a triumphal column in the park. On the four sides of the pedestal are inscribed descriptions of the victories of that great commander, and his statue is upon the

abacus, supported by figures of captured enemies, and surrounded by trophies.

The *milliary column*, or *milliarium aureum* of Rome was originally a column of white marble, which Augustus erected near the temple of Saturn in the Forum, as a centre whence the account of the miles began in their calculation of distances from the city. This celebrated column is still in existence, being placed on the stylobate in front of the Campidoglio, the modern capitol at Rome. It is a short column, with a Tuscan capital, and has a ball of bronze for a finial, as a symbol of the globe. It was called golden either because it was once gilded all over, or at least the globe and ornamental accessories. As a companion to it is a similar column bearing on its summit a vase, containing the ashes of Trajan, with the following inscription:—"HOC IN ORBICVLO OLIM TRAJANI CINERES JACEBANT; NVNC NON CINERES, SED MEMORIA JACET. TEMPVS CVM CINERE MEMORIAM SEPELIVIT. ARS CVM TEMPORE NON CINEREM, SED MEMORIAM INSTAVRAT; MAGNITVDINIS ENIM NON RELIQVIÆ, SED VMBRA VIVA MANET, CINIS, CINERI IN VRNA ÆTATE MORITVR. MEMORIA CINERIS IN ÆRE ARTE REVIVISCIT.

The principal insulated commemorative or triumphal columns now remaining are the following; namely, *Pompey's pillar* or column at Alexandria, in Egypt. Opinions have differed much as to the date of its erection, and to whose memory it was raised. Its style is that of Dioclesian and the lower empire. Engravings and descriptions of this ancient monument may be found in the works of Denon, and other Egyptian travellers. It is of Thebaic granite, of the Corinthian order, and, according to the best authorities, it measures sixty-four feet in the shaft, about five feet in the base, ten feet in the pedestal, and from ten to eleven in the capital. A Greek inscription was discovered by the British, who were there at the time of Sir Ralph Abercrombie, which dedicates it to the Emperor Dioclesian, under the government of the Prefect Portius. The opinion sustained by its common name, that it was erected by Cæsar to commemorate his victory over Pompey, has had respectable supporters. Denon, and some other writers, have supposed it part of an immense building, of which they trace the ruins adjoining. It has been sometimes thought to commemorate the favours of Hadrian to this city, and still more frequently those of Severus; while some writers ascribe its erection to Ptolemy Philadelphus, in memory of his queen Arsinoe; and others to Ptolemy Eugertes.

The *Trajan column*

"————————— tall,
From whose low base the sculptures wind aloft,
And lead, through various toils, up the rough steep,
Its hero to the skies"——

is one of the most celebrated monuments of antiquity, and has endured the stormy battleings of the elements and the waste of time for more than seventeen centuries. Its height, including the pedestal and statue, is one hundred and thirty-two feet. This monumental column was erected in the centre of the Forum Trajani, and dedicated to the Emperor Trajan for his decisive victory over the Dacians, as is testified by the inscription on the pedestal. It is of the Doric order, and its shaft is constructed of thirty-four pieces of Greek marble, joined with cramps of bronze. For elegance of proportion, beauty of style, and for simplicity and dexterity of sculpture, is the finest in the world. The figures on the pedestal are masterpieces of Roman art. It was formerly surmounted by a statue of Trajan, which is now replaced by a statue of St. Peter.

The *column* of the Emperor *Phocas* is near the temple of Concord; is of Greek marble fluted, and of the Corinthian order, four feet diameter, and fifty-four feet high, including the pedestal.

The *Antonine column* was erected by the Roman senate to the glory of Marcus Aurelius, for his victories over the Marcomanes, in the reign of Commodus. Aurelius afterwards dedicated it to his father-in-law, Antoninus Pius, to which the following inscription, cut by order of Pope Sextus V. in 1589, after an ancient one almost defaced bears witness. MARCVS AURELIVS IMP. ARMENIS, PARTHIS, GERMANIS BELLO MAXIMO DEVICTIS, TRIVMPHALEM HANC COLVMNAM REBVS GESTIS INSIGNEM IMP. ANTONINO PATRI DICAVIT. According to a rigid admeasurement made by M. de la Condamine, this column measured one hundred and sixteen French feet in height, and eleven in diameter. It is built entirely of marble, and encircled with bassi rilievi, which form twenty spirals around its shaft. It has also been well elucidated by engravings and descriptions by *Pietro Santi* BARTOLI. It is in every respect inferior to that of Trajan as a work of art, particularly in the style and execution of the sculptures. It was repaired in 1589 by Fontana, under the pontificate of Sextus V. who placed a colossal statue of St. Paul upon its summit, with the following inscription, "SEXTVS V. PONT. MAX. COLVMNAM HANC COCHLIDEM, IMP. ANTONINO DICATAM, MISERE LACERAM RVINOSAMQVE,

PRIMÆ FORMÆ RESTITVIT, A.M.D. LXXXIX. *Pont. IV.*

There is also in Rome another column bearing the same name, situated on the Monte Cittorio. Its shaft is of a single piece of Egyptian granite, forty-five feet in height, and five feet eight inches in diameter. Its pedestal is ornamented with bassi rilievi, representing the apotheosis of Antoninus and Faustina, and other events relating to the history of Rome. It has been repaired by Lambertini, and Pius VI. removed the bassi rilievi to the Vatican, and it is engraved in the 5th volume of the Museo Pio Clementino. On one of its sides it has the following inscription:—"DIVO ANTONINO AVGVSTINO PIO ANTONINVS AVGVSTVS ET VERVS AVGVSTVS FILII."

Till the commencement of the eighteenth century there were to be seen at Constantinople two insulated columns, ornamented with bassi rilievi, in the style of the Trajan column at Rome. One was erected in honour of Constantine, and the other of Arcadius or Theodosius. Of the latter there is nothing left but its granite base, the column being destroyed by the Turks because having been several times damaged by earthquakes, they were fearful of its falling. The *Constantine column* was composed of seven large cylindrical blocks of porphyry, and was originally surmounted by a statue of Constantinople. After having been several times damaged by fire, it was repaired by the Emperor Alexis Commenes, as is indicated by an inscription in Greek.

Of modern columns, that called the Monument, at London, which was erected in commemoration of the great conflagration of 1666, is at once the loftiest, the best constructed, and the most beautiful. It is a Doric fluted column, two hundred and two feet high from the bottom of the pedestal, which is ornamented with a bassi rilievi of Charles II. and his Court giving protection to the fallen city, and various inscriptions, to the top of the vase of flames by which it is surmounted. There are also several smaller columns, but of beautiful proportions, in various parts of England, in imitation of the above, but mostly of the Grecian or pure Doric order, as the Anglesea column, erected in commemoration of the battle of Waterloo and the noble earl of that name, in the island of Anglesea. The column at Shrewsbury, erected in commemoration of the same event and of another noble general, Lord Hill. The Nelson columns at Yarmouth and in Dublin. The Wellington column at Trim, in the county of Meath, Ireland, &c.

COMB. [camb, Saxon.] *In the costume of painting and sculpture.* An instrument to separate and adjust the hair. We have no certain authority from either busts or medals that either the Greek or the Etruscan women used this useful and ornamental appendage to their hair; although in most of them it is carefully and gracefully arranged. Nor in the discoveries that have been disinterred at Volterra and other Etruscan cities, where abundance of utensils and instruments of the female toilet have been found, has there been a single comb among them. There is therefore no authority with which we are at present acquainted to inform us from whom the Romans borrowed this article of the toilet. Many of their sepulchral inscriptions are dedicated to their dressing maids *(ornatrices).* GUASCO, in his work *Delle Ornatrici,* has cited one at page 5, of a certain Polydeuces or Pollux, in honour of *Cipa-rena.* Besides the name and quality of his friend or manumitted slave, Pollux has had sculptured upon one side the bodkin or pin with which the Roman women fastened their hair, and on the other a comb.

It is probable that the combs of the Romans were of ivory, box, gold, and silver, but, according to Guasco, they were also of iron and of bronze. In the beforementioned work of that author, *Delle Ornatrici,* there are several representations of ancient Roman combs. One in particular at page 63, that was in the Museum Settala at Milan, is a long one of box, of which the handle is overlaid with ivory, and appears to have been ornamented with a small mæander in gold. It has two rows of fine teeth delicately wrought and well proportioned. Another is engraved from the same original that Montfaucon has also published in Supplément à l'Antiq. Expliq. tom. iii. plate 21, fig. 2. Both writers judge them to be of no great antiquity. Canova and other modern sculptors have made great use of the comb in their female busts, to which they add a grace and elegance unknown to those of the ancients.

COMBATS. See BATTLES.

COMITIUM. [Lat.] *In ancient architecture.* A building wherein the assemblies of the people were held for the election of magistrates and other officers, and the making of laws. The meetings were called *comitia curiata* when they voted by whole courts; *centuriata* when they did it by hundreds; *tributa* when by tribes; and in each the majority carried. See CIC. *de leg.* In this building justice was also adminis-

tered from the ivory chair called *Sella Curulis* (see CURULE CHAIR); and under it stood inferior benches called *subsellia*. The Comitium was in the Roman Forum, which occupied the entire space between the Palatine Hill, the Capitol, and the Via Sacra. It was separated originally from the Forum by rows of steps and barriers; and was uncovered till the memorable year that Hannibal first entered Italy, when it was embellished and covered with a roof, supported by lofty and beautiful fluted columns of the Corinthian order. Three of them, with their architrave, are still standing in the ancient Forum, near the church of Santa Maria Liberatrice. The capitals are wrought and finished on the side next the Forum, but rough on the opposite side. Some antiquaries have supposed that these columns are the remains of the temple of Castor and Pollux, others a portion of the bridge of Caligula, which went from the Palatine Hill to the Capitol, and others that they are ruins of the temple of Jupiter Stator. That they are part of the comitium is, however, for every reason, the most plausible conjecture. The excavations recently made at their base, by order of the late Pope Pius VII. have laid open some remains of buildings at the depth of fourteen feet below the surface of the soil, which was about the level of the ancient Forum. The Comitium was anciently ornamented with pictures that the ædiles Varro and Murena captured from the Lacedemonians, and with a number of fine statues. Among others was a beautiful one of Venus, called *Cloacina*, because Tatius, king of the Sabines, who, after the peace between him and the Romans, reigned conjointly with Romulus, discovered it concealed in the Cloaca. This accounts for the inscription *Cloacina*, with a representation of the comitium, being on a Roman medal of the Mussidian family. Representations of this building is also found on medals of the families of Hostilia, Silia, and (according to Morell) Licinia. See CURIA.

COMPARTMENTS. [*compartimenti*, Ital.] *In painting and architecture.* The arrangements, or curved, mixed, or right lines into superficial figures or divisions for use or ornament. In the distribution of a city the streets should be formed into proper compartments. In the elevation of a building, the parts should be divided into proper and suitable compartments, according to its nature and quality. Apartments should also be arranged into proper compartments, and the walls therein be divided into graceful proportions, and proper subdivisions, which may be decorated with paintings, bassi rilievi, arabesques, &c. See also PANEL.

COMPASS or COMPASSES. [*compas*, Fr.] *In all the arts.* A mathematical instrument to draw circles, and to measure or define distances between two points. The triangular or three legged compasses takes three points at once, and is useful in trigonometrical drawings and geographical drawings, as well as for the engraver. There are also proportional compasses of four points, two at each end, with a sliding centre, by which distances measured with one pair of points, a proportion thereto according to the situation of the centre, is given by the other.

COMPLUVIUM. [Lat.] *In ancient architecture.* A void space in the centre of ancient Roman buildings, constructed to receive the waters that fell from the roof. Also a gutter, penthouse, or eaves.

COMPOSITE ORDER. *In architecture.* See ORDER, COLUMN, CAPITAL, ARCHITECTURE.

COMPOSITION. [*compositio*, Lat.] *In painting, sculpture, and architecture.* The arrangement of various component parts to form a whole, whether of figures, trees, vessels, &c. in a painting or piece of sculpture, or of doors, windows, piers, columns, pilasters, cornices, &c. in a building. To compose well is one of the first qualities necessary for an artist, after he has acquired the elements of his art, and commenced an original work. Composition, in many instances, vies with and, in fact, is invention (see INVENTION); and in others takes up only arrangement and disposition; as in the composition of a group of portraits in one case, and of an historical picture in the other.

Composition, to be excellent, should be subservient to nature. A study of nature will assist composition, for nature mostly composes and groups well. Composition may even be said to enter into the arrangement of a single figure. Raffaelle's Cardinal Sforza, Titian's Cardinal Bentivoglio, Reynolds's Mrs. Siddons, as the tragic muse, the same great master's General Heathfield, holding the key as governor of Gibraltar, Flaxman's Lord Mansfield, in Westminster Abbey, and Chantrey's James Watt, are beautiful instances of a happy composition of the parts of a single figure.

General or ideal beauty carried to a system will never aid composition. The beauty of the Faun is of one kind, that of the Apollo of another; the beauty of the Venus differs from that of the Diana, yet

they are all beautiful. Character is another essential quality in composition, particularly in architecture; for buildings should carry distinctive marks of their qualities and use upon their fronts. The composition of theatrical edifices should differ from municipal buildings. Churches again from assembly rooms, and dwelling houses from ancient temples. Yet how often are these essential qualities in art neglected.

A composition in painting and sculpture may be rich in figures, and in architecture abundant in parts, and yet be poor in ideas. A composition should be learned, not pedantic. The composition is generally settled in the sketch, and where that is not from the first moment determined upon and good, the work, however well finished in detail and colour, will never be excellent. See DISPOSITION.

CONCAMERATA SUDATIO. [Lat.] *In ancient architecture.* The apartment in the Gymnasium where the wrestlers and racers retired after their contests to wipe away their sweat. It was situated between the *laconicum* or stove and the warm bath.

CONCAVE. [*concavus*, Lat.] *In architecture.* Hollow; such as cavettos, quirks, niches, recesses, &c.

CONCLAVE. [Lat. from *con* and *clavis.*] *In architecture.* An inner apartment, where the attendants cannot come but with one key; but more specially the name of the place where the cardinals meet to choose a new Pope, on a vacancy of the Pontifical throne. The conclave is in the Pontifical Palace of the Vatican, and consists of a suit of grand halls or corridors, with rows of cells formed on each side of equal dimensions, being five feet long and four wide. Two are allotted to each cardinal, one for his eminence and the other for his officer, called the conclavist, and his valet de chambre. They are all painted green, except those of the cardinals who were created by the deceased pope, whose cells are painted violet colour, and the insides are lined with serge of the same colour. The cardinals, after having heard all the bulls read which relate to the election of the pope, and the manner of living in conclave, which they are all sworn to observe, are then kept in close conclave till they have decided upon which cardinal the election has fallen.

CONDUIT. [Fr.] *In architecture.* A long narrow passage between two walls, or under ground, for secret communication between various apartments; of which many are to be found in ancient buildings. Also a canal of pipes for the conveyance of waters; a sort of subterraneous or concealed aquæduct. The construction of conduits requires science and care in their execution. The ancient Romans excelled in them, and formed their lower parts whereon the water ran, with cement of such an excellent quality, that it has become as indurated as the stone itself which it was employed to join. There are conduits of Roman aquæducts still remaining of from five to six feet in height, and three feet in width.

Conduits of modern times are generally pipes of wood, lead, iron, or pottery ware, for conveying the water from the main spring or reservoirs to the different houses and places where it is required.

CONFESSIONAL. [from *confessionis*, Lat.] *In architecture.* A cell in a Catholic church wherein the confessor sits to hear confessions. The confessional, of which there are many in every Roman Catholic church and chapel, is a species of cell built of joinery, with a boarded back next the wall, or against a pillar or a pier, divided into three niches or small cells. The centre, which is for the reception of the priest, is closed half way up by a dwarf door, and has a seat within it. There is a small grated aperture in each of the partitions between him and the side cells, which are for those who come to confess, and have no doors. They are susceptible of taste in their form and decoration, and in many Catholic churches are sufficiently handsome.

CONFUSED. [from *confusus*, Lat.] *In criticism.* Perplexed, indistinct, not clear. A work of art, whether in painting, sculpture, or in architecture, is said to be confused when the figures or other component parts are ill arranged, the lights ill distributed, the colours badly sorted, and is the very opposite of excellence in composition. A subject may be crowded, but should not be confused. The beautiful sculptures of the temple of Minerva Parthenon, called the Panathenaic procession, are crowded, but any thing but confused; and many modern works are both crowded and confused.

Confusion in architectural composition often arises from ornaments being too crowded in every part, leaving no repose for the eye. This vice in art is never found in the exquisite designs of the Greek school, nor in the purest of the Roman and Italian schools; but often in those of the middle ages, and in parts of modern Europe. Baalbeck, Palmyra, Spalatro, and parts of the New Street, London, are examples of this error.

CONGIARIUM. [Lat.] *In Roman archaiology and medallogy.* A largess or bounty of money given by the Roman emperors to the people upon certain occasions, by the hands of certain officers called *Sequesters* or *Divisores.* The money that was also distributed by the rich class of Roman citizens to the people when they sought their favours or their votes was also called by the same name. Tiberius, Caligula, and Nero, stand in history among the most profuse in their congiarii to the people. Nero was the first who commemorated his corruption by stamping the money with which he bribed the slaves of Rome with the image and superscription of baseness. The type of the medals or coins which represented, and were struck for the *congiarii,* exhibited the tyrant seated upon his *suggestum* or chair, borne up by men, giving a *tessera* or ticket, which indicated what the receiver was to get for his prostration, to a citizen, a woman, or a child.

CONISTERIUM. [Lat. Κονίστρα, Gr.] *In ancient architecture.* An apartment in the gymnasium and palestra, where the wrestlers, after anointing themselves with oil, were besprinkled with dust, that they might take the surer hold of one another.

CONNOISSEUR. [Fr.] *In criticism.* A judge of works in art; a critic in matters of taste. A connoisseur should be acquainted with the principles of the art, which he professes to understand, more deeply than the amateur. See AMATEUR. It is sufficient for the latter to love the arts, to patronize them, and to understand them generally; but the connoisseur or critic should be a learned judge if not a practitioner. He should be acquainted with the beauties and demerits of drawing, anatomy, perspective, expression, character, colour, chiaroscuro, composition, style, &c. &c. He should also be well read in history, a good mathematician, if his inquiries lead him to architecture, acquainted with mythology, the ancient poets, and every branch of elegant literature.

CONSECRATION. [*consecratio,* Lat.] *In the history of the arts.* A dedication to the service of any one. Among the ancients, a consecration was the dedication of a temple, statue, altar, or other work of art to a deceased person, or a god, and in many instances, the word has a similar meaning to apotheosis (see that word).

In modern times it has a similar meaning, but is principally confined to the dedication of a building to sacred uses.

CONSERVATORY. [*conservatorio,* Lat.] *In architecture.* A building for the conservation and protection of tender plants. Among the Italians, a *conservatorio* is more properly understood as being a nursery or school for singers; but the word, as well as the building, is confined in England to botanical uses only.

The conservatory is distinguished from the greenhouse by the circumstance of its affording protection or conservation only to the plants; while the greenhouse is used for the rearing of them. The conservatory is also often attached to the house as an apartment for the display of scarce and valuable plants during the time of their greatest beauty and perfection, which are removed from the greenhouse, stove, and hothouse, to the conservatory for such temporary exhibition, while space is allowed for walks between the stages and plants.

CONSTRUCTION. [*constructio,* Lat.] *In architecture.* The art of building from the architect's designs. The act of arranging the materials of a structure in a scientific manner. See ARCHITECTURE.

CONSULAR MEDALS. *In numismatics.* Medals struck during the time of the Roman republic, not bearing the name of any particular family, as in later times, which are called *family* medals. See MEDAL.

CONTORNIATES. [from *contorno,* Ital.] *In numismatics.* A species of medals or medallions of bronze, let into a circle of another material. The contorniate medals have seldom such high relief as the common medals, being scarcely more raised than our modern current money. On many ancient medals of this sort are found a monogram composed of the letters P and E, or an R reversed, with a palm engraved in intaglio. On one side is generally a head, and on the other some historical mythological subject, taken from their plays.

What distinguishes the contorniate medal from others is the want of connection between the subjects of the reverse and the head upon the obverse. As mythological and heroic subjects, such as Cybele and Atys seated in a car drawn by lions; a bacchanal; the combat between Hercules and Nessus the centaur; that between Achilles and Penthesilea, Queen of the Amazons; Diana and Endymion; the education of Achilles by Chiron the centaur; the rape of the Sabines; and the Circus Maximus at Rome, as reverses to the head of Alexander the Great:—gymnastic exercises, races in the circus, on the reverses of Homer, Horace, Socrates, Virgil, Apollonius Tyaneus, Terence, Sallust, Apuleius, &c. On a contorniate medal, described by Millin, is even found the

heads of Nero and the younger Faustina. The same types are often to be found upon reverses of different heads; as the fable of Scylla is represented upon medals having the heads of Alexander the Great, Nero, and Trajan. See the works of Spanheim, Ducange, Pinkerton, Morel and Mahudel, on medals.

CONTORSION. [*contorsio*, Lat.] *In painting and sculpture.* Unnatural, twisted, or awkward flexure in the drawing or execution of a figure. An expression may also, through exaggeration, or want of attention to nature, become a contorsion instead of animation.

CONTOUR. See OUTLINE.

CONTRAST. [*contraste*, Fr.] *In all the arts.* An opposition, contrariety, and dissimilitude of figures, by which one contributes to the visibility or effect of another. Contrast in painting arises either from the management of the lights and shades, or *chiaroscuro;* from the varieties in size, age, character, complexion, and passions of the figures. In sculpture it arises from the same causes, except colour; and in architecture, from breaks, varieties of heights, differences of orders, characters, &c. The study of due contrast in every work of art is essential to a fine effect. See also OPPOSITION.

CONTRE FORTE. See COUNTER FORT.

COPING. [from *cop* or *kop*, Dutch.] *In architecture.* The upper course of masonry which covers the wall, wrought and laid so as to throw off the water.

COPPER. [*koper*, Dutch, *cuprum*, Lat. i. e. *Æs Cyprium*, because much of it was dug in Cyprus.] *In the arts of statuary, engraving, and numismatics.* One of the six primitive metals. This metal, so useful in the arts, is the most ductile and malleable after gold and silver. It is also harder, more tenacious, lighter, and more elastic. It is, therefore, more proper for the engraver's purpose, and from its cheapness more fitting for the statuary in cast metal. Copper mixed with other metals forms bronze. See BRONZE.

Copper was the metal most used in the heroic days of Homer. Most of his translators have rendered the word χαλκος, brass, perhaps as being more poetical in sound. Antiquaries call this metal, when referred to by ancient writers, whether pure or mixed into brass, by the name of bronze.

The discovery and use of copper preceded that of iron. Yet it is probable that iron was known in the days of Homer's heroes; for in speaking of polished iron and copper, he calls the first white and the other red. Some authors attribute the discovery of copper to Cadmus; but according to Strabo, it was first found at Chalcis, a city in Eubœa, now called Negropont, whence its Greek name. Other authors say it was first dug in the island of Cyprus, and thence obtained its Latin appellation. Pliny says the *æs Cyprium*, or Cyprus copper, was not so much esteemed as that which was procured from other places. There are several sorts recorded by Roman authors, as being in much esteem; namely, the *æs Sallustianum* which they worked in the Alps, and named from *Sallust* the proprietor of the mine; the *æs Livianum* obtained from Gaul, and named after *Livia* the wife of Augustus; the *æs Marianum*, brought from a mine in Spain, which either belonging to the Marian family, or was situated in the *Marianus Mons* (now the Sierra Morena), which parted Tarraconis (Arragon) from Bætica; and the *æs Cordubensis*, which was obtained at *Corduba* (Cordova) in Spain.

The mixed metal called by the ancients *æs Corinthium*, Corinthian brass, was in much esteem, and reckoned more valuable than silver. Its original composition is said to have been fortuitous, and to have arisen from the mixture of many rich and costly statues of sundry sorts of metals, which were melted, after the siege of Corinth, by Lucius Mummius, in Anno Mundi, 3827, A. U. C. 630, who burned the city and razed it to the ground, as a punishment for the Corinthians casting urine on the heads of the Roman ambassadors.

Some critics have thought that Homer alludes to the mixed metal called brass or bronze, but he every where speaks of it as a pure and not as a compound metal. When Vulcan, in the eighteenth Iliad (v. 475), makes the armour of Achilles, he puts the copper in the fire, and forges it like other metals, and though the poet mentions ductile tin, impenetrable copper (χαλκός), precious gold and silver; he records their separate uses, as the tin for the greaves, copper for the helmet and corslet, brighter than the splendour of fire, gold for the crest, and silver for decorations to the shield; he never mentions their mixture into a compound metal.

Among the Romans, copper or bronze was in use for engraving the public acts. In a conflagration which happened in the reign of Vespasian, three thousand tables of this metal were consumed, that were preserved in the capitol. It was also used in construction for floors and roofs, instead of carpentry, as we now use cast iron. The roof of the portico of the Pantheon of

Agrippa was thus constructed, and the cupola covered with the same, till they became the prey of the Barberini family, under their head Urban VIII. who made from them the Berninesque Baldachino of St. Peter's, and above eighty pieces of cannon; which occasioned the biting epigrammatic inscription "Non Barbari sed Barberini fecit." The memory even of this fine and imperishable piece of construction would have been lost, had not Serlio, who was an admirer of this piece of metallic carpentry, preserved its design in his treatise on architecture.

This metal was also used to ornament the interior, as well as the exterior of many ancient edifices. At Lacedemon was a temple of Minerva entirely of bronze or copper, which was called *chalciæcus*.

Copperplate. *In engraving.* A plate of polished copper on which engravings are made. See Engraving.

Copy. [*copie*, Fr.] *In all the arts.* A transcript from the archetype or original. A work of art executed in every part after another which is called the original. When an artist copies his own works, it is called a double or duplicate. The artist who executes an original work proceeds upon ideas created by himself and formed by his imagination, or presented to his eye by nature; while he who copies has before his eye a work of the same nature with that which he would execute. It is, therefore, more easy to make a good copy than a good original; which is the reason why many an artist of mediocrity has succeeded in producing good copies, even such as might be mistaken for the originals, who could not produce an original work. There have been many instruments invented and made to facilitate copying, but nothing is equal to a correct eye and a well practised hand.

Coral. [*coralium*, Lat. Κοράλλιον, Gr.] *In gem sculpture.* A marine zoophyte, that becomes, after removal from the water, as hard as a stone, of a fine red colour, and will take a fine polish. Coral is much used by gem sculptors for small ornaments, but is not so susceptible of receiving the finer execution of a gem, as the hard and precious stones. Caylus has published an antique head of Medusa, sculptured in coral, of which the eyes are incrusted or let in, with a white substance resembling shells. He supposes it to have been an amulet; because the ancients, who were partial to a mystical analogy between the substance and the subject represented (see Allegory), supposed, as Ovid relates in his Metamorphoses, that Perseus, after having cut off the head of Medusa, concealed it under some plants of coral, which instantly became petrified, and tinged with the colour of the blood which flowed from it, and from a green turned to a red colour.

Pliny and other ancient authors attribute many superstitious qualities to the coral, therefore it is no wonder that it was often taken for an amulet. Pliny also relates that the Gauls and other people, who resided near the coast, as well as those of the maritime parts of Italy, used it to form sculptural ornaments for their armour and household furniture.

Corbel. [*corbis*, Lat. *corbeille*, Fr.] *In architecture.* A sculptured modillion or bracket, sometimes made in the form of a wide basket, and used to support columns, piers, cornices, and other projections. Used in this manner, they belong to the decadence and depraved style of the art, that was introduced in the middle ages, and has been revived in this country within these few years, with, however no followers. The French word corbeille has a more extended meaning, and belongs to sculpture. The baskets on the heads of Canephoræ and Caryatides, are thus called by their authors, as well as vases sculptured in imitation of wicker basket work. See Calathus, Caryatides, Canephora.

Coryceum. [from Κόρυκος, Gr.] *In ancient architecture.* The name of an apartment in the gymnasii of the Greeks. Some critics think it received its name from a ball or stuffed bag (κόρυκος), which was suspended from the ceiling for the purpose of play, and is synonymous with the *sphæristerium;* while others conceive it to have been another name for the apodyterium.

Corinthian order. See Architecture, Base, Capital, Column, Order.

Corinthian brass. See Bronze, Copper.

Cornelian or Carnelian. [*cornaline*, Fr. *corniola*, Ital. from *carneus* or *corneus*, Lat.] *In gem sculpture.* A precious stone of a light red or flesh colour, whence its name *carnaline*. It is much used for seals, bracelets, necklaces, and other articles of minute gem sculpture. Its name is also derived from *corneus* or horny, whence its other name *cornelian*, it being reckoned by mineralogists among the hornstones. It was known to the Romans, as we learn from Pliny, by the name of *Sarda*, from being found originally in Sardinia.

Cornelians are of various colours, from a light and fleshy red, opake, and semi-transparent, with and without veins, to a

brilliant transparency and colour approaching the ruby, from which it is, however, known by sure and distinctive marks. Winckelmann describes a cornelian of this latter sort, on which was engraved a portrait of Pompey.

The cornelian is a stone well fitted for engraving in intaglio, or sinking as for seals, being of sufficient hardness to receive a fine polish, and wax does not adhere to it, as it does to some other sorts of stones which are used for seals; and the impression comes off clear and perfect. The number of cornelians that were engraved by the ancients, and have reached our times, are very considerable, and nearly equal all the other kinds with which we are acquainted. From an ancient epithet, "cornelian of the old rock," Pliny conceives that they were taken from a rock of that material near to Babylon; and that they were clarified by being steeped in the honey of Corsica. The royal collection at Paris, and the British Museum of London, have numerous ancient engraved cornelians of a fine description. Many of the latter were found in the field of Cannæ in Apulia, where Hannibal defeated the Romans so signally that there were forty thousand men slain; and among them such a number of the higher class, that he sent to Carthage three bushels of the rings which they wore, as a token of his victory.

Cornice. [*coronis*, Lat. *corniche*, Fr.] *In architecture.* The upper division of an entablature. There is as great a characteristic difference between cornices of the several orders, as between the capitals of the columns, and in a good style of art they never encroach upon each other.

The *Corinthian* cornice is the richest, the loftiest in proportion, the fullest of members and enrichments of all the orders. It is known by its graceful proportions, its modillions, dentels, and sculptured members.

The *Ionic* cornice is of graver proportions, has no modillions, and very seldom in the best examples dentels, which had better always be left to the rich and gay Corinthian. Harmony of proportion, beauty of profile, particularly in the cymatium, breadth of parts, especially in the corona, are the leading features which characterize this order.

The *Doric* cornice is lower in its proportions than either of the others, has a greater comparative projection, and is known by the masculine character of its cymatium, which is always in the purest examples a beautiful echinus; by its mutules and drops, one of which is over every triglyph and metope of the frieze. See Architecture, Entablature, Order.

Corona. [Lat. Χορωνός, Gr.] *In architecture.* The coping, crown, or brow of the cornice which projects over the bed-mouldings to throw off the water, and form a division both for effect and use between the cymatium, and crown members, and the bed or lower division of the cornice.

Coronation medals. *In numismatics.* Medals which are struck in commemoration of a coronation, and distributed among the people. See Medal.

Coronet. [*coronetta*, Ital.] *In costume.* An inferior sort of crown worn by the nobility, differing according to the degrees.

Corrections. [*correctio*, Lat.] *In painting.* Emendations of errors, by the addition of something contrary. The Italians call the correction of errors or alterations of first thoughts in paintings, that are still visible under the emendations, *pentimenti*, and they are to be found in many of the finest originals. Some critics think them proofs of originality, and in some cases correctly so, for if there were a fine picture by Rubens with pentimenti, and another of the same subject without, the latter would undoubtedly be considered either as a copy, or as a duplicate; but if a copy be made for the purpose of imposture by an able copist, he would undoubtedly imitate the pentimenti, and even the uncorrected errors; and this picture would then be, in the opinion of these dogmatists, an original. See Copy.

Correspondence. [from *con* and *respondere*, Lat.] *In all the arts.* A reciprocal relation or adaptation of one part to another. The painter, the sculptor, or the architect, may choose his proportions to be large or small, short or tall, but there should be a certain correlation or correspondence of parts, pervade the whole composition. The façade of a building of the Corinthian order, should not be embellished by windows, doors, and sculptures of a short or bulky proportion; and so in a picture or a group of sculpture, the parts should be in just correspondence with each other.

Corridor. [*corridore*, Ital. from *currere*, Lat. to run round.] *In architecture.* A gallery or long passage, connecting the various apartments of a mansion; sometimes carried on every side of a quadrangle. The corridor is sometimes constructed between two rows of apartments, when it must receive its light and air from above; but is more agreeable when on one side,

when it can have its window on the opposite side to the apartments, and be made of more than one story in height. The corridor being merely a passage, and as it often leads to bedchambers, dressing-rooms, baths, and other private apartments, it should not be decorated with pictures, or other works of art, that are likely to detain persons in their progress to such places; except when on the principal story, where it communicates only with dress apartments, when it is usual to hang maps of the estate, or of the neighbourhood, genealogical charts, and such like general matters; which, however, are better placed in the hall or vestibule. Corridors are necessary only in large houses, where numerous chambers and suits of apartments are required; and in public buildings which require similar accommodations, as monasteries, convents, colleges, barracks, hospitals, &c.

Cortile. [Ital.] *In architecture.* The area or court yard of a dwelling house, which in Italian architecture is often splendidly embellished with columns, statues, &c. It is the same with the cavædium of the Romans. They reckon four sorts of *cortili*, namely, open cortili, roofed cortili, both without columns, and open, and roofed cortili with columns.

Cortina. [Lat.] *In the archaiology of the fine arts.* According to Virgil the tripod (τρίπους) a table with three feet, whence the oracles of Apollo were given by the Pythia or Pythonissa. It was called *cortina* from being covered with the skin of the serpent Python. The ancients also called by this name any culinary vessel of metal that was hollow and stood upon three feet, and, according to Pliny, the caldron or vessel in which wool was dyed, was so named.

Representations of the cortina are to be found on ancient medals, and among others upon some copper denarii of Brutus, a golden denarius of the family of the Cassiæ, and upon some medals of Vitellius. On some bronze medals of Neapolis in Campania (Naples), the cortina is represented as covered with a carpet. The Pythia or Pythonissa was seated upon the *cortina* when she received the enthusiasm of the god to deliver in oracles to the people. She is thus represented upon some medals of the first kings of Syria; and upon a fine medallion of Nitocles, king of the Paphians, Apollo is seated upon the cortina, which is also covered with a carpet.

On a very fine antique fictile vase in Mr. Thomas Hope's magnificent collection, is a painting of the expiation of Orestes, whereon is a representation of the *cortina* covered by a carpet; which Mr. Westall has introduced into his picture of the same subject in Mr. Hope's gallery.

Cortinale. [Lat.] *In ancient architecture.* The apartment wherein was placed a cortina.

Corymbium. [Lat. Κορύμβιον, Gr.] *In ancient sculpture.* A manner of dressing the hair in a conical form on the top of the head, resembling the thyrsus of Bacchus, more particularly appertaining to figures of Diana, huntresses, victories, the muses, and youthful female figures in general.

Corymbus. [Lat. Κόρυμβος, Gr.] *In ancient sculpture.* Pyramidal or conical garlands of ivy berries, thistles, artichoke heads, &c., which were used to encircle ancient drinking vases, Bacchanial dresses, friezes, &c. Also the name of similar sculptures at the two extremities of the Roman ships.

Corytus. [Lat. Κωρύτος, Gr.] *In ancient costume.* The quiver or arrow case. There are many authorities to be found for the *corytus*, or antique quiver, as described by Homer, and other ancient writers, on medals of Calatia in Campania, Heraclea, &c.

Costume. [Ital.] *In painting and sculpture.* The manner, way, or style of dress among different people. An observant study of costume, which in its extended sense means the time, the manners, the customs, the taste, the dress, the arms, and in fact the character of a people and of a country, is of the highest importance both to the painter and the sculptor. The artist who would represent an historical event or action that has taken place, such as it was in every respect, should make himself acquainted with every particular relating thereto. These particulars, as far as concerns the appearance of the scene, buildings, personages, &c. is called the costume of the subject. It also means the mere clothing or garments of a people. The old masters are by no means particular in their observance of this essential portion of their art, and in many instances committed the grossest blunders in costume. Abraham has been represented obeying the divine command of sacrificing his son Isaac with a blunderbuss, Agamemnon as a Prussian general, Othello with a bag wig and silk stockings; while learned pedants have represented Frederick the Great in Grecian armour, and General Wolfe as a Roman General.

The painters of the Lombard, the Flemish, and the Venetian schools have been

the most faulty, in this respect, and the French, with the exception of Poussin and Le Sueur, till the time of David and his school, have been also reprehensible. Louis XIV. is often represented both by their painters and sculptors in Roman armour and costume, with the mountainous wig of his own period.

The sculptors of the English school, as may be seen in their best works in Westminster Abbey and St. Paul's, have been scarcely less to blame. A British captain is fighting naked, while others are in antique armour. Flaxman attempted modern costume in his Lord Howe, Nelson, Rodney, and other public monuments, with some success, in spite of the example of the Duke of Cumberland in Cavendish Square, and completely in his classical statue of Lord Mansfield. Chantry has completed the triumph of modern and appropriate costume, in his whole length statues of Dr. Cyril Jackson and James Watt.

Our painters have been far less faulty, and errors of costume are not among their prevailing faults. The best works for the study of this branch of art are the various representations of ancient sculptures, bassi rilievi, coins, medals, &c. which have clothed figures upon them. WINCKELMANN *Histoire de l'Art;* DANDRE BARDON *Traité de Costume*, which is, however, drawn from the works of painters and not original authorities. *Le Traité des Costumes, par* LENS, and an edition of the same with notes, by MARTINI. *Les Recueils de Costumes Antiques de* ROCHEGGIANI *et de* WILLEMIN, is a very useful work. But the best study is that of the original works of the ancient sculptors of all nations, and their monuments, tombs, ancient portraits, painted glass, and other authentic documents, and the works of their descriptive and historical poets and historians. See also the various articles of the details of costume in this Dictionary, the various Cyclopædias, Encyclopædias, &c. &c.

COTHURNUS. [Lat. Κόθορνος, Gr.] *In ancient costume.* A species of boot or buskin worn by hunters, and also by actors of tragedy, when they represented the characters of gods and heroes. They differed from the sandal, which was a mere sole tied about the toes and ancles with thongs and straps of leather, while the cothurnus covered the foot and leg as high as the calf, and was ornamented with gold, gems, and ivory. The Melpomene of the Vatican is accoutred with cothurni, so is the Diana of the Townley collection, and several statues of Roman emperors and generals. Virgil and Cicero also mention them as making part of the costume of hunters and tragedians.

COTTAGE. [from cot, Saxon.] *In architecture.*] A mean or humble habitation, built with clay, and thatched with straw. "The pride that apes humility" has converted the humble dwelling of the labourer into an absurd luxury, replete with folly and bad taste. *Le Hameau de Chantilly, Le Chaumière de Trianon,* and *La grande Chaumière* upon the Boulevard Neuf at Paris, rival for inconsistency and bad taste some in our country; where imitative mud walls, and thatched roofs, with hovel like windows, and cottage chimneys, enclose pavilions, drawing rooms, boudoirs, Persian carpets, marble and or-molu chimney-pieces, couches, ottomans, cabinet pictures, bijoutrie, and all the splendour of palaces and town mansions.

Not so the unpretending cottage of some of our men of real taste, where the exterior surpasses its type, and the interior does justice by its comforts and arrangements to the good taste and appearance of the interior. The cottage to be in character and picturesque, should not be too new in appearance, nor naked in planting. The late Richard Payne Knight defines part of its accompaniments in his poem called the Landscape, in the following lines,

> "Its roof, with reeds and mosses cover'd o'er,
> And honeysuckles climbing round the door,
> While mantling vines along its walls are spread,
> And clustering ivy decks the chimney head."

The real English cottage is a small house in the country, of irregular form, with various harmonious tints upon its surface, the effect of weather, time, and accident; the whole surrounded by garden scenery, neat, trim, and comfortable. See also VILLA.

On the architecture of picturesque cottages, the following works may be consulted with advantage; namely, "*An Essay on British Cottage Architecture*, by JAMES MALTON, 4to. Lond. 1798; *Designs for Villas and other Rural Buildings*, by EDMUND AIKIN, Architect, 4to. Lond. 1815; *A Series of Designs for Villas and Country Houses*, by C. A. BUSBY, Architect, Lond. 1818; *Architectural Designs for rustic Cottages, picturesque Dwellings, Villas, &c.* by W. F. POCOCK, Architect, 4to. Lond.; *Sketches in Architecture, consisting of original Designs for Cottages and rural Dwellings*, by T. D. W. DEARN, Architect, 4to. Lond. 1807; *Architectural Sketches for Cottages, rural Dwellings, and Villas*, by R. LUGAR, Architect, 4to. Lond. 1805; *The Country Gentleman's Architect*, by the same

author, 4to. Lond. 1807; *Designs for small picturesque Cottages, Hunting-boxes, &c.* by E. Gyfford, Architect, 4to. Lond. part I.; *Designs for elegant Cottages and small Villas*, by the same author, 4to. Lond.; *Hints for Dwellings, consisting of original Designs for Cottages, Farm-houses, Villas, &c.*, by D. Laing, Architect, 4to. Lond. 1800 and 1804; *Sketches for Country-houses, Villas, and rural Dwellings*, by John Plaw, Architect, 4to. Lond. 1800; *Designs for Villas, Casinos, Mansions, Lodges, and Cottages*, by James Randall, Architect, 4to. Lond.; *A Series of Plans for Cottages*, &c. by J. Wood, Architect of Bath, large 4to. Lond.; *The Country Gentleman's Architect*, by J. Miller, Architect, 4to. Lond. 1797; *Rural Residences, consisting of a series of designs for cottages, decorated cottages, small villas, and other ornamental buildings, accompanied by hints on situation, construction, arrangement, and decoration, in the theory and practice of rural architecture, interspersed with some observations on landscape gardening*, by John Buonarotti Papworth, Architect, large 8vo. Lond. 1818, which is without exception one of the most useful, tasteful, and elegant books that has appeared in the English language on this truly British subject. *Architecture rurale, théorique et pratique*, 8vo. Thoulouse, 1820; *Designs for picturesque Cottages*, by W. Atkinson, Architect, 4to. Lond. 1805; *Essay on rural Architecture*, by R. Elsam, Architect, 4to. Lond. 1803; *Hints for improving the Condition of the Peasantry, with Designs for Cottages*, by the same author, 4to. Lond. 1816; *Engravings, with Descriptions of the modern Style of rural Architecture, and the improvement of Scenery*, 4to. Lond. 1807; W. and J. Halfpenny's *Rural Architect*, 4to. Lond. 1755; *Rural Architecture, or a Series of Designs for ornamental Cottages*, by P. F. Robinson, Architect, 4to. Lond. 1822; J. T. Smith's *Remarks on rural Scenery, with twenty etchings of Cottages from Nature*, 4to. Lond. 1797; F. Stevens's *Views of Cottages and Farm-houses in England and Wales*, Imp. 4to. Lond. 1816.

Counter fort. [from *counter* contrary to or against, and *fort*, Fr. strong.] *In architecture.* Piers or oblique walls built up against walls that are likely to bulge. See Buttress.

Counter proof. [from *counter* and *proof*.] *In engraving.* An impression taken from a newly printed proof of a copper-plate, printed for the purpose of a closer investigation of the state of the plate, as the proof is in every respect the reverse of the plate, while the counterproof has every thing the same way. Counterproofs of Dorigny's engravings from the Cartoons are more valuable than the prints, which are reverses of the pictures, and the counterproofs the same way, except that the writing is backwards as on the plate.

Countermark. [from *counter* and *mark*.] *In numismatics.* Antiquaries call by this name those stamps or impressions which are found on ancient coins or medals and have been given since their first impress in the mint. These countermarks or stamps are often done without any care, and frequently obliterate the most interesting portion of the original inscription. To perform this operation they did nothing but stamp the new mark upon the coin with a heavy blow of a mallet upon a punch, on which was engraved the countermark, of a round, oval, or square shape. The use of countermarks appears to have been first adopted by the Greeks, but it is impossible to say at what epoch of their history. Upon the Greek coins so altered, the countermarks are generally figures, accompanied by inscriptions; those of Rome seldom contain any thing more than inscriptions and monograms. There have been various opinions upon the cause of these countermarks; some antiquaries thinking that they were to indicate an augmentation of the value of the money upon which they were stamped; others that they were vouchers for workmen; and again that they were only struck upon money taken or received from foreign enemies. Jobert, Millin, De Boze, Bimard, Mabudel, Pelleim, Florez, and other medallic antiquaries, have exercised their conjectural skill on this subject.

During the long war with revolutionary France, England stamped millions of Spanish dollars with small oval countermarks of the head of George III. upon the neck of the Spanish monarch, and many of them were completely restamped or countermarked in the mint, and both impressions were casually visible. The English head and reverse not completely destroying the Spanish head, armorial bearings, and inscriptions.

Course. [Fr.] *In architecture.* A continued range or layer of stones or bricks, arranged in a peculiar manner for strength called *bond*.

Court. [*cour*, Fr.] *In architecture.* 1. An open space before or behind a house, or situate in the centre or between the main body and the wings. 2. The district of a city where a royal palace is situated. 3. The hall or chamber in a municipal building where justice is administered.

4. A small street enclosed with houses and paved, but not passable for carriages and horses. The modern court or court-yard in a palace or mansion is equivalent with the *Cavædium* in ancient Roman architecture. (See CAVÆDIUM.) The courts of almost all the houses in Pompeii were paved in compartments with marble or in musaick. The large court in the palace at Versailles is thus done, and is therefore called the marble court. See PALACE, TOWN HALL.

CRAMP. [*kramp*, Dutch.] *In architecture and sculpture.* Pieces of iron, bronze, or other metal, bent at each end, by which stones in buildings, and limbs, &c. of statues are held together. The ancient Romans made great use of cramps in their buildings, and the cupidity of modern barbarians like Pope Barberini, have destroyed many a fine work for the sake of the bronze used in its construction. The Pantheon, and its fine portico by Agrippa, and the Colosseum, have most suffered by these wanton aggressions, and the baldachin of St. Peter's, and some eighty pieces of brass ordnance, to thunder Papal bulls from the Vatican, are all we have in exchange for some of the finest works of which the world could boast.

CRANE. [cran, Sax.] *In mechanical architecture.* An instrument or machine made with ropes, pulleys, and hooks, by which blocks of stone and other heavy weights are raised. Vitruvius calls this machine, which was known to the Romans, *carchesium.*

CRANE. *In pictorial mythology.* A bird with a long neck and beak, fabled by the poets as enemies to the Pigmæi, a small race of people in Æthiopia. On a painting in Herculaneum there are several groups of this little people, one of whom is holding a miniature statue in his hand. (See PIGMIES.) Some archaiological critics pretend to recognise in this statue Geranos, a female of great beauty, who was revered by the Pigmæi as a divinity. Her name (Γέρανος), in Greek signifying a crane, gave rise to the fable, that having treated Diana and Juno with contempt, they changed her into the bird of that name, and she became the most implacable enemy to her former worshippers. Two antique Greek vases, published by Tischbien, represent the wars between the pigmies and the cranes. The fable is also told by Ovid and alluded to by Juvenal.

A celebrated antique dance that was instituted by Theseus in the island of Delos, in memory of his deliverance from the labyrinth by Ariadne, also bore the same name. It was executed by young Athenians who had escaped with him from the power of the Cretan monarch. It was called geranion, or the crane dance, from the actors imitating the mazes of the labyrinth in their involutions, and the flight of the cranes in troops, with the master-bird or leader at their head, which figured their escape with Theseus as conductor, followed by Ariadne, Phædra, and his fellow prisoners in that form.

CRANIOLOGY. See PHRENOLOGY.

CRAYON. [Fr.] *In painting.* A kind of pencil, a roll of colour prepared with earths so as to draw, and colour dry on proper paper. Crayons are both natural and factitious, and are of various colours. Crayons of plumbago or black lead, of various degrees of hardness, are the best for architectural drawings, and the outlining of water colour paintings on paper or velvet. They are also capable of forming beautiful finished drawings in black and white, which produce a good effect. Black and red crayons are generally, with the white, termed chalks, and are much used in the art of drawing on tinted paper by students in paintings, and for drawing their outlines on the canvass. The preparation of crayons belongs to a work on manufactures; and their use is very limited compared with former times. ROSALBA *di Carara*, HOARE *of Bath*, and RUSSELL have distinguished themselves as crayon painters, but it is now scarcely practised, and not at all by any artist of talent.

CRESCENT. [*crescens*, Lat.] *In archaiology.* Representations of the moon in her state of increase. This emblem of the Ottomans is of very high antiquity. The influence of the moon occasioning various physical phenomena was soon perceived by the ancient philosophers; and they personified it under various types. The Egyptians had their Isis, the Greeks their Diana, and it is natural to conceive that the crescent, which announced the commencement of the moon, soon became an object of worship with such people. Thus Isis, Diana, the bull Apis, are decorated with this emblem; which is also found on medals of Alexander and other ancient monuments of art. The citizens of Athens of illustrious birth wore crescents of ivory and silver upon their buskins; and the same mark of distinction was granted to the patricians and senators of Rome. They were called *Lunulati Calcei.* The crescent was often used as an ornament to the female head; an example of which may be seen on a bust of Marciana in the Villa Pamfili. On many medals of queens, the bust

is supported by a crescent allusive of their relative situations to their husbands, who, as kings, were as the sun, while they were as the moon. It is also an emblem of the eternity of an empire. The god Lunus bears it upon his shoulder; and the denarii of the Lucretian family have it also accompanied by the seven stars of the Northern hemisphere. It is also found on medals of many cities, particularly Byzantium; from whence it is supposed to have been borrowed by the Ottomans. Since this period the crescent has been the universal emblem of their empire. It decorates their minarets, their turbans, their ensigns, their insignia, and every thing appertaining to the Mussulman is characterized by this sign, and their states are designated the empire of the crescent.

Crest. [*crista*, Lat.] *In costume.* The ornament affixed to the top of the helmet. The crests of the ancient Greeks, as we learn from Homer, were of gold and other metals, raised upon the crown of the helmet, and covered with horsehair, which were so arranged as to add to the statue of the hero, and inspire terror in his enemies. Hector is described by the poet as "of the waving plume," (Il. III. v. 324; VI. v. 263, 440; XIX. v. 135); and in his combat with Paris, "he seized him by the helmet crested with horse hair," (Il. III. v. 369). In the celebrated interview between that hero and the faithful Andromache, Astyanax, their infant son, shrinks back, "fearing the horsehair crest which nodded terribly from the summit of the helmet," (Il. VI. v. 470.) When Vulcan makes the new armour for Achilles, he "put upon it a golden crest," Il. XVIII. v. 611.

The crests of the antique helmets were sometimes divided from the base, spreading like two horns, while the interval was filled with the flowing mane of a horse, and a plume arose on either side. Such is the crest of Minerva on Mr. Hope's fine antique vase, which has a painting of the expiation of Orestes. The helmet of a Lapitha, on a vase in the Hamilton collection at the British Museum, is similarly crested. Herodotus attributes the addition of the horsehair crest to the Ethiopians; and Titus Livius mentions helmets with large and waving crests as peculiar to the Samnites, who wore them to make them appear of loftier stature, and of more formidable aspect to their enemies; and he adds that the Campanians added the lofty crest to the helmets of their gladiators as a mark of contempt, and called them Samnitic. The Etruscans were also celebrated for their lofty crests, and modern artists have given similar additions to the helmets of the three Horatii. The mane of horsehair which was appended to the crest was called by the Greeks λόφος, and by the Romans *crista* and *juba*, and the part which upheld it, or the metallic crest, was called φάλος by the Greeks, and *conus* by the Romans. The plume and the crest must not be confounded. The former, when composed of the mane or tail of a horse, was called *hippuris*, ἱππεφις, by ancient authors; and Virgil gives such a plume and crest to Mezentius, King of the Tyrrheni, the friend of Turnus.

The horns on the beforementioned helmet of Minerva is supposed to resemble the *pinnæ* which Varro ("*Pinnæ quas insigniti milites habere in galeas solent, et in gladiatoribus Samnites,*") attributes to the Samnite helmets. Juvenal, in alluding to the gladiators, to whose exertions some of the first families in Rome were indebted for their heirs, calls them *Pinnirapi*, an epithet which puzzles Millin, who says that the translators of that satirist have passed it over in silence. He thinks with the old scholiast upon Juvenal, that the gladiators appeared decorated with peacocks' feathers, and that the pinnirapi were those who bore these feathers. They are, however, "gladiatores quòd *pinnas rapiunt*," Isid. The gladiators who, with a net (also called from that cause *retiarii*), was to surprise his adversary and *tear* off *the crest* of his adversary in token of victory.

Criticism. [from *critic.*] *In all the arts.* The art of a critic. The standard of judging well.

Critic. [Κριτικος, Gr. *criticus*, Lat.] *In all the arts.* A man skilled in the art of correctly judging the merits of artists, and of their works. The Greek original of this important office means, aptus ad dijudicandum, skilled in judging between contending merits, a man of judgment, or the faculty of judging itself.

By abuse of the powers assumed by critics, the title is often understood as meaning one who takes upon himself to censure and blame the works of others—censurers, instead of impartial judges. The proper office of a critic should be "admonere, non mordere; prodesse, non ladere;" and criticism, says an Italian proverb, should be *benefica, non venefica.*

A sound and impartial critic, in matters which naturally come under the government of the empire of taste, should give reasons for the judgment that is in him,

why he prefers one work to another, and why he praises this portion or condemns that. By such conduct he convinces the world of the purity of his motives, and his criticism tends to the improvement of his patient where he finds fault, and to his confirmation in sound principles and practices where he praises. The extent of knowledge which a critic possesses should be all that is necessary for the learned connoisseur. (See CONNOISSEUR.) To which should be superadded many other qualities, and among the principal, a temperateness of judgment, a coolness of head, a goodness of heart, and a strict and honest impartiality.

The critic who undertakes the examination and the passing of judgment upon works of ancient art, has an easier task to perform, as far as concerns prejudice, than he who is to sit in judgment upon his contemporaries, the "genus irritabile" pictorum. *Praise* will never satiate them, and *censure*, even when deserved, rarely amends them.

The business of giving judgment upon ancient art is an important office. Among its duties are the examination of the merits of monuments of antiquity of every class and species, and the arranging of them in their proper places. The archaiological critic has to decide upon their antiquity, the period when they were executed, their authenticity, their use, and similar questions. In order to perform this arduous task, it is necessary that he should possess a knowledge of ancient tongues, of geography, of chronology, of the classical writers, and of all that relates to ancient art, such as archaiology, antiques, antiquities, history, poetry, and literature.

Many of the works that will of necessity come under such an investigation, will be found deteriorated by time, by age, or by accidents. Such as the dilapidations of the weather, time, and barbarism upon the far famed Elgin marbles, and other ancient sculptures and inscriptions. The deterioration of ages upon coins, or their disfiguration by clipping and countermarking. It is the duty of such a critic to supply these deficiencies, to make out the intentions, to fill up the gaps in the inscription, to supply, with a cool head and sound judgment, what is wanting. He should be able to distinguish impostures in art, know what are restorations or reparations, and what parts are original, and decide upon the propriety or fallacy of the emendations. Innocent impostures should have no charms for him, and the exposition of the cheats of trading antiquaries should be his daily pleasure. The unveiling of the manufacturers of genuine antiques, who hide and then can find, should be his constant avocation; of such who will alter the legend and even the reverse of a medal in their descriptions, and will add to an engraved gem the name of any eminent artist they please, where it be wanting, to vamp up their manufactures. In this manner did Pickler add the name of Dioscourides, the celebrated *Augustan* gem sculptor, to a stone which represented *Caligula*. In this way was the name of Lysippus added to the famous Florentine Hercules.

These forgers of names would go farther if they had abilities for the task; but they have employed obscure talent to aid their impositions, in imitating the inferior work of the ancients with sufficient accuracy to impose upon the unsuspecting credulity of enlightened connoisseurs. Caylus, Winckelmann, and Barthelemy have been thus deceived, as well as many others who would rather father the cheat than acknowledge that they had been tricked. It was thus that an Italian trickster put off a purposely fractured head of a beautiful Flora upon one of our most enlightened English connoisseurs, at as large a price as a genuine antique, when it was the work of an able foreign artist now in the employment of the English government. And "when the candle came he was" not "cured," for although the artist wrought a duplicate almost before his eyes, the purchaser had such faith he would not see the light.

Sebastian Ricci also imitated some of the worst originals of Paolo Veronese so well that he tricked many into a belief of their originality, and when the fraud was discovered, one whom he had deceived told him to paint nothing but Veroneses, and no more Riccis. So may it be said to some of our gem sculptors, make antiques and not coins.

Of such impostures are the medals which were fabricated by John Cauvin of Padua, called Paduanino, Carteron, of Batavia, Laurentius of Parma, and Michæl Dervieu of Florence.

Among other imitations of antiques which, however, are not to be reckoned among impostures, are the beautiful imitations of the fictile vases of the Greeks and Etruscans, by the late Mr. Wedgwood; particularly his celebrated copy of the much disputed Portland or Barberini vase in the British Museum. (See VASE.) Guerra imitated with great success the ancient pictures at Herculaneum; and Winckelmann himself, with all his sagacity as a critic, and knowledge as a connoisseur,

was deceived by a painting after the antique by his friend Casanova, which he took for genuine (see PAINTING); and by an engraved stone, which is now in the collection of the Royal Library at Paris, which was actually the performance of Pickler. Altering the legends of medals, sawing them in two, and joining them to form variations of obverse and reverse, are not among the smaller cheats that have been practised upon the critics.

These alterations and substitutions produce a host of errors that will puzzle the best informed connoisseur of the day; and similar errors have arisen as much from the ignorance of some professed critics and antiquaries as from the cupidity of others. Thus, the errors which Struys and Serlio have fallen into concerning the buildings and other ancient monuments of Persepolis: which Laurus, Da Costa, Kircher, Fischer von Erlach, Pignorius, Æneas Vicus, Ligorius, Panvinius, and others, have published of amphitheatres, naumachiæ, statues, that never existed but in their imaginations, and many of the medals described and figured by Goltz, are justly rejected by critics and antiquaries.

Sometimes genuine monuments have been misrepresented, as in the idea which Picart gave of the statue of Memnon, thinking it to be no longer in existence. Upon the engraving of an antique gem, which represents the murder of Polyxena, Gravelle has changed the figure of the soul into an urn. Instead of the Taurobolus which is upon the triumphal arch at Suza, Maetjens has metamorphosed it into Aaron offering sacrifices.

These are impostures and blunders; but critics have fallen into no less important mistakes through error and misunderstanding of their subjects. The name of Solon upon an engraved stone for a long time was believed by the critics to refer to the great Athenian legislator; while at the same time it was the name of the artist who executed it. A *præfectus viarum*, or superintendant of roads, says Mabillon, was canonized under the name of Saint. *Viar*. An antique head, bearing the name of *Arethon* the engraver, was for some time regarded as the representation of *Arethusa*. The Minerva Aspasia (Ἀσπάζομαι) was thus for a long time taken for a portrait of Aspasia, the friend of Pericles and Socrates. Those learned critics Bellori and Winckelmann have been often deceived, and put forth errors in archaiology; and the reveries of Pere Hardouin, who in medallic legends of the clearest nature, dreamed of occult mysteries under concealed initials, are well known. So also in our own times a learned antiquary, in describing the antique sculptures at Petworth, has described a handsome youth as a young female. These errors, inseparable as they are from human nature, are pardonable where they do not proceed from wilful deceit, and show the importance and the utility of the critic's art.

In respect of archaiology, history, and costume, it becomes every artist to be himself a critic. A deficiency of this knowledge led Rollin to speak of the Laocoön as of a lost work, and the artists of the French school to decorate Hercules with a flowing wig of Louis XIV. and that monarch with Roman armour and a French perruque. A want of critical knowledge has led the old masters into many and serious errors. Greeks have been painted in Roman armour, and Romans in French and German costume. Cato has been represented reading a modern bound book, and Grecian ladies reading letters doubled en envelope like a love letter of the nineteenth century. See COSTUME, PAINTING, SCULPTURES, ATTRIBUTES, &c. &c.

CROBYLUS. [Lat. Κρώβυλος, Gr.] *In ancient costume.* The manner in which the hair of men is arranged in certain antique statues, somewhat like the manner of the Belvidere Apollo. The *crobylus* was for men, the *corymbus* for women, and the *scorpius* for boys. See these words.

CROCKETS. [from *croc*, Fr. a tenterhook.] *In gothic architecture.* The small bunches of foliage which are used to ornament canopies, spires, and pinnacles. The larger bunches on the top are called *finials*. See FINIAL.

CROCODILE. [*crocodilus*, Lat. Κροκόδειλος, Gr.] *In the mythology of the arts.* An amphibious voracious animal, in shape resembling a lizard, and found in Egypt and the Indies; where it is called an alligator. It received its ancient name from κρόκον δειλιᾶ, *crocum metuit*, fearful of the crocus, whose odour or colour this creature is said by Dioscourides the physician, and other ancient writers, to fear, or be averse from. Formerly almost every river in Africa was infested with these amphibious monsters, whereas they are now rarely found but in the Nile. The kingdom of Fez, which is quite free from them at present, was in ancient times quite overrun with them. They were also in Mauritania in the time of the younger Juba, for it is related that he consecrated one in the temple of Isis at Cæsarea, about the time of the commencement of the Christian era. In the days of Herodotus Lower Egypt was also infested with crocodiles, but they are now very rarely found in that portion of the country, or till the

Nile enters Upper Egypt above the 28th degree of latitude. Seneca, says that Balbillus, who was præfect of Egypt in the time of Nero, reported that he had witnessed at the Heracleotic mouth of the Nile dolphins coming from the sea, and crocodiles descending the Nile to combat them like regular armies.

Representations of this animal on ancient coins are, according to M. Zoëga, always to be considered as emblematical of the Nile. It is also found on a fine musaic discovered at Palestina; upon the base of the statue of the Nile in the Museo Pio Clementino, and upon many other antique monuments.

Sculptural representations of the crocodile, on works not wrought in Egypt, the crocodile is always to be understood as the symbol or emblem of that country. A crocodile chained to a palm tree represents the subjugation of Egypt. The crocodile was worshiped in many Egyptian cities; among others, particularly so at Thebes, at Arsinoë, which was called from that cause Crocodilopolis.

Crocota. [Lat. Κροκωτὸς, Gr.] *In ancient costume.* A portion of female dress, a gown, or toga, of a crocus or yellow colour.

Crosier. [from *cross.*] *In costume.* The pastoral staff or emblematical crook of a bishop. The crosiers of many of the ancient Catholic bishops were made of costly materials and elegant workmanship. The greatest artists of Italy, such as Benvenuto Cellini, Giovanni da Bologna, &c. have been employed in their execution.

Cross. [*croix*, Fr.] *In all the arts.* One straight body laid at any angle upon another. The ensign or emblem of the Christian religion, as being a representation of the instrument of punishment, on which Jesus Christ suffered death from the Jews. The form in which many churches and cathedrals are built.

The cross of the ancients was simply a beam of wood fastened against a tree or upright post, on which they executed criminals of the very worst class. After the crucifixion of Jesus, and the extension of the Christian religion, the cross was assumed as the distinctive ensign of its followers. Constantine is generally supposed to have been the first who ordered it to be used as the sign or emblem under which he would fight and conquer, in remembrance of the miraculous appearance of a cross in the heavens.

The cross was, however, used emblematically before the Christian era. Upon a multitude of medals and ancient monuments are to be found crosses placed in the hands of statues of victory, and of figures of emperors. It was also placed upon a globe, which ever since the days of Augustus has become the sign of the empire of the world and the image of victory. The shields, the cuirasses, the helmets, the imperial cap, were all thus decorated. The cross has also been often stamped upon the reverses of money, as is proved by the old English game of cross and pile; and also upon the coins struck at Constantinople, and of the line of the Franks from the time of Clovis. Examples of them are given in the Dissertation by Ducange, *sur les Médailles Byzantines*, and in the treatise by Le Blanc, *sur les Monnoies des France.* The cross is now the universal Christian emblem, being used upon the arms and banners of the soldier, the vestments of the priest, and in the armorial bearings of the gentry. The forms of our churches, and often the patterns of their pavements are adapted to the representation of the cross; which is also sculptured upon and elevated upon tombs and sepulchres. Sculptured crosses of various descriptions, elevated upon handsome pedestals, were formerly erected in cemeteries, market places, to designate peculiar events, like the queen's crosses at Northampton, Waltham, &c. Many very fine ones of which are still to be seen in many parts of Great Britain, and particularly in Ireland.

In the time of the crusades or wars for the recovery of the Holy Land from the Turks, the cross was the emblem and the namegiver of the crusaders, who took up the cross and swore to defend its faith against infidels. From this period the cross entered into the art of heraldry, where it still maintains a distinguished place among the ancient families of Europe. It is also raised as a sign of Christianity on most Christian churches and ecclesiastical buildings of the Catholic religion.

Architectural antiquaries have two sorts of crosses for the forms of churches, the Greek and the Latin. The Greek cross has its arms at right angles, and all of equal length, whereas the Latin cross has one of its limbs much longer than the other three. Bramante originally set out St. Peter's as a Latin cross; Michel Angiolo reduced it to the proportions of a Greek cross; but Carlo Maderno again elongated it to the original dimensions of Bramante. The cathedral of St. Paul, London, is a Latin cross, with its base spread by a sort of second transept, which

increases the breadth of the western front in a very beautiful manner.

CRUDE. [*crudus*, Lat.] *In painting.* Harsh, raw, unconnected, not well digested. Crudity in painting is when the colours are laid on roughly, without blending or harmony. Sometimes crudeness arises from want of finish, and at others for want of ability to manage the colours better.

CRUSTA. [Lat.] *In ancient architecture and gem sculpture.* Pieces of wood, ivory, tortoiseshell, metal, &c. inlaid into or incrusted upon vases, shields, doors of temples, walls of apartments, &c. in the manner of modern buhl, marquettry, &c. (See these words). According to Pliny, Mamurra, the noble Roman who boasted that he had in his house every thing that France (Gallia) could afford him, was the first who covered the walls of his house with a *crusta* of marble. Pliny also uses this word to designate the inlaid work which embellished the slabs of marble used by the Romans, when they inserted pieces (crustæ) of another colour. When these applied or inlaid ornaments were left projecting, they called them *emblamata* (from ἐμβλημα, ab inserendo). They were often so constructed as to be taken off and put on at will. Cicero reproached Verres, among other crimes, with taking the crustæ and emblemates from the vases. The emblemates and their antithetæ are thus described by Calepinus, "emblemata in parietibus dic. *vermiculata*, in pavimentis *tessellata*, in lignis *segmentata*."

CRYPT. [*crypt*, Lat. *In architecture.* A hollow place or vault constructed under ground. Also the tombs of the Christian martyrs were so called where the early Christians met to perform their devotions, for fear of persecution. Whence crypt came to signify a church under ground, or the lower constructed story like that of St. Paul's, London, Lastingham Priory, and many of the ancient ecclesiastical edifices of England, Germany, and France. When crypts are on a large scale like those of Rome, Naples, and Paris, they are then called catacombs. (See CATACOMBS.) Bartoli and Bellori have published engravings of paintings found in the crypts of Rome, of which there are several editions. The one of 1738 is in Latin.

CRYPTOPORTICUS. [Lat. from *crypta* and *porticus*.] *In ancient architecture.* A concealed gallery or portico; or one that is enclosed on every side to be cool in the heats of summer. Many of these enclosed or concealed porticoes were half sunk in the ground, and some completely so. They were constructed adjoining the villas, mansions, and palaces of the Romans, for the purpose of retiring from the excessive heats of the noonday sun, and for perambulation in the cool and fresh air. Even when nearly buried in the ground they were not without light and air, as were seen in the long concealed porticoes of Hadrian's villa, which were, without doubt, the cryptoporticus of the palace, received light and air from openings at the ends, and perforations in various places.

In many instances, however, the cryptoporticus differed no otherwise from our present galleries and corridors, than that they had columns in them, whence they derived the latter half of their name. The description which Pliny gives of the cryptoporticus of his favourite villa Laurentinum, near Laurentum, seventeen miles from Rome, proves that it was often and in this instance a long and covered gallery lighted like the other apartments of the house, and used for walking and conversation during the continuance of the heats. "From hence," says Pliny, "an *enclosed porto (cryptoporticus)* extends, which, by its great length, you might suppose erected for the use of the public. It has a range of windows on each side, but on that which looks towards the sea, they are double the number of those next the garden. When the weather is fair and serene these are all thrown open; but if it blows, those on the side the wind sits are shut, while the others remain unclosed without any inconvenience. These are some of its winter advantages: they are still more considerable in summer; for at that season it throws a shade upon the terrace during all the forenoon, as it defends the gestatio and that part of the garden which lies contiguous to it from the afternoon sun, and casts a greater or less shade as the day either increases or decreases; but the portico itself is then coolest when the sun is most scorching, that is, when its rays fall directly upon its roof. To these its benefits, I must not forget to add, that, by setting open the windows, the western breezes have a free draught, and by that means the enclosed air is prevented from stagnating." (PLINY's Letters, book ii. letter xvii. *Melmoth's* translation). This animated description of a cryptoporticus, of the best order, proves to what a state of luxury and magnificence the ancient Romans had arrived in the days of Trajan. See VILLA.

CRYSTAL. [*crystallus*, Lat. Κρύσταλλος, Gr.] *In gem sculpture.* Hard, pellucid, and, naturally, colourless stones, of regular angular bodies, used for seals, rings,

cups, vases, and other ornamental purposes. Rock crystal, so called because it is most usually found in rocks, is the transparent prismatic crystals of quartz. It is probably the first substance ever noticed as occurring in a regular form. The ancients believed it, from its transparency, to be water permanently congealed by extreme cold, from which circumstance it derived its name (Κρυσταλλος *glacies; aqua frigore concreta*). This mineral crystallizes in prisms of six planes with two hexangular pyramids; the form of the primitive crystal is a slightly obtuse rhomb. Miss Lowry gives the angles of incidence of the planes, measured by a most accurately divided gomometer, as 94° 15′ and 88° 45′.

The most beautiful and transparent crystals are brought from India. They are also found in the mountainous regions of the Alps, and clear and large specimens are also brought from the Brazils. The British isles possess them in great abundance, particularly the neighbourhood of Bristol, and various parts of Ireland. They are called Bristol and Irish diamonds. In Ireland they have been discovered of very large sizes, and fine specimens of them are to be seen in the Museum of the Royal Irish Academy, in Dublin.

Ancient authors make mention of crystals also of a very large size. Pliny relates that the largest which he had seen was one that the Empress Livia dedicated in the capitol, which weighed nearly forty pounds. Xenocrates mentions having seen a vase of crystal which held an attic amphora (nearly ten gallons and a half English wine measure), and others vouch to having seen vases of this mineral that would contain eight English wine gallons. Nero purchased of the mother of a family, who was not rich, a basin of crystal, for which he gave a hundred and fifty thousand sesterces (£1171. 17*s*. 6*d*. sterling); and at his last extremity, when he heard there was no hope for him, and he could find neither friend nor enemy to dispatch him, when he uttered those memorable words "nec amicum habes, nec inimicum," he broke two splendid crystal cups that no one should enjoy them after him.

Coloured transparent crystals are not uncommon. Their colour arises from the metallic oxydes which they contain. The Brazilian, and Scotch or Cairngorm topaz, is a crystal of quartz of a yellow or brownish colour. There are good specimens of this yellow crystal also brought from Switzerland. The brown ones are sometimes called smoky quartz. They are also white and colourless, gray, greenish, yellowish white, the different shades of yellow, the light brown, and the dark brown varieties, which pass into red, of which there are several kinds. Quartz has also been found of a beautiful pink colour, but it never crystallizes and is considered as a distinct subspecies. The darkest and brightest red crystals, much resemble the colour called by painters Venetian red, for the colouring matter of both is oxyde of iron.

The ancient engravers used crystal for their best works. Pliny regrets bitterly the two fine vases of crystal upon which were engraved subjects taken from the Iliad, which Nero broke as before mentioned. An epigram in the Anthology mentions an artist of the name of Caius Satureius, who engraved a portrait of Arsinoë upon crystal.

The various cabinets of Europe possess many antique engraved crystals, some of which have been engraved by Borioni and others. They have also been well imitated in glass, but the deception is soon discovered. See Glass.

Cube. [*cubus*, Lat. Κύβος, Gr.] *In architecture and the geometry of the fine arts.* A regular solid body, consisting of six square and equal faces or sides, and the angles all right and therefore all equal.

Cubiculum. [Lat.] *In ancient architecture.* The etymology of this word means a bedchamber; but it had also, among the Romans, the extended meaning of chamber. Pliny mentions both the *cubiculum* and the *dormitorium*. *Cubiculum* also means a royal pavilion; the balcony or tent whence the emperor enjoyed the public shows. According to Suetonius, Julius Cæsar constructed one in the orchestra of the circus and amphitheatre, and his successors kept up the distinction. They gave to this pavilion the name of *suggestum*, which at first was a simple scaffold, whereas the *cubiculum* was enriched by curtains which concealed the interior from the view of the spectators.

Cubit. [*cubitus*, Lat.] *In ancient architecture and sculpture.* A measure of length used by the ancients, which was considered as the distance from the elbow, bending inward to the extremity of the middle finger, being about one foot and a half English measure, or one foot five inches and .952 exactly. The geometrical cubit was, according to Vitruvius, equal to six of the common cubits.

Cubits of the Nile. *In archaiology.* The sixteen genii which ancient sculptors

placed about the figure of Nilus to express the sixteen cubits which the Nile rose on its inundations.

CUIRASS. [*cuirasse*, Fr.] *In military costume.* A breastplate; also armour for the back and breast. According to Herodotus, the Assyrians wore cuirasses or armour for the body, of quilted or wadded linen, which Pliny remarks will resist the cut of a sword; and the resistance of stoutly wadded or quilted silk, even against a musket bullet, is well known. The ancient mode of preparing these linen cuirasses, was to macerate the material in wine mixed with a proportion of salt; and then to full or cement together from twelve to eighteen layers of the cloth, in the manner of making felt. These were without doubt the species of cuirass on which the muscles of the body were represented, as shown in antique sculpture. Such was the cuirass of the Emperor Conrad, described by Nicetas Achomitates, in his history of the reign of the Emperor Isaac Angelus. This sort of cuirass was proof against iron, and were used by many nations, says Cornelius Nepos, in the stead of iron. Linen cuirasses were used in the days of the Homeric heroes, for in the Iliad (II. v. 530), Ajax, the son of Oïleus, is described by the poet as armed with a corslet of linen. In progress of time they wore cuirasses of iron over those of cloth or linen; and oftentimes of brass or bronze, or of leather and metal. The brazen cuirass was called Θωραξ ταδιος, or ταπος, and was formed of polished brass. The cuirass of leather and metal was made of a jerkin or body coat, covered with chains of rings, and then it was called Ἀλυσιδωτος. Sometimes the plates or rings resembled scales, and then it was termed Λεπιδωτος and Φολιδωτος. When they were made wholly of leather, they were called by the Romans *coriaceus*, whence the modern word cuirass is evidently derived. According to Tacitus, the Sarmatian chiefs wore cuirasses formed of thin plates of iron, fastened on coats of hard leather. Homer calls the Greeks in many places mailed and brazen coated. In the seventeenth Iliad (v. 194), Hector and Æneas advance to the attack of the chariot of Achilles, "covered to their shoulders with bulls hides, dry and thick, over which much brass was plated."

In the beginning of the eleventh Iliad (v. 20. et seq.), he also describes the armour, particularly the corslet or cuirass of Agamemnon, which was presented to him by Cinyras, the King of Cyprus, as a token of hospitality, when he heard that the Greeks were about to sail up against Troy in ships. Wherefore he gave him this, gratifying the king. Ten rods indeed were of dark blue (κυάνος, color cæruleus), or black metal (probably bronze green with ærugo and rubbed bright, Cowper, and I believe Dr. Clarke, render it azure steel), twelve of gold, and twenty of tin, and three azure serpents on each side were spread towards the neck, like to rainbows, which the son of Saturn hath fixed in a cloud, as a sign to articulate speaking men. An accurate idea may be formed of the cuirass of the ancient Greeks by comparing this and other descriptions of Homer with ancient statues and paintings on the Grecian vases, particularly the fourth vase in the first volume of the collection by TISCHBEIN, and the figures of Etruscan soldiers in the Royal Library of Paris, published by Caylus. All the armour described by Homer as worn by his heroes, is of enormous weight; so much so, that Plutarch, in his life of Pelopidas, calls them walking colossi of brass. Pausanias, of all other ancient authors, has given us the best description of the Homeric cuirass, which he introduces in a description of a picture by Polignotus, representing the siege of Troy. They were according to this author formed of two sheets of bronze or brass, one of which served as a protection to the back, and the other to the chest and entire front of the body. These sheets of brass formed by the hammer into the requisite forms, were called γύαλα, hollows or cavities, and they were joined together by hooks and studs. They were sometimes reckoned of sufficient safety for the protection of the wearer, for which reason the warlike Phorcys, the son of Phenops, entering the lists with Ajax (Il. xvii. v. 312.) without a shield, was slain by the brazen javelin, hurled by the strong unerring hand of Ajax, burst the cavity (γύαλα) of his corslet, and the weapon drank his entrails through it. The clasps or πεφοναι, which served to join the back and breastplates together, are accurately defined upon the before quoted vase in Tischbien's collection, and were made of various metals and curiously ornamented. The thirty-fourth plate in the sixth volume of Caylus, represents a small bronze figure, of which the cuirass is like those just described, and is a good example in connection with the descriptions of the poets and other writers for the examination of the student.

The lower part of the cuirass was encircled by a belt or girdle, which Homer calls the zone (ζωνη, or ζωστηρ), and which

completed when on the arming of the hero. Hence the expression ζωννυσθαι (accingere se ad prælium), girded or prepared for battle.

The cuirasses or corslets of the ancients were variously ornamented. That of Minerva had in its centre the Gorgon's head, which is also found on the cuirasses of many of the Roman emperors. On other ancient specimens are found dolphins, and occasionally other ornaments. The modern cuirass, formed on the description of those of the ancients, differs but little from those of the Greeks, except perhaps in size and weight, which the personal activity and quickness of modern warfare render necessary.

Cup. [Saxon.] *In painting and sculpture.* A small low kind of vase, wider than it is deep. It is sometimes used as a sculptural decoration to architecture.

Cupola. [Ital.] *In architecture.* An hemispherical roof, often used as the summit of a building. The Italian word cupola signifies an hemispherical roof, which covers a circular building like the Pantheon at Rome, and the round temple at Tivoli. Many of the ancient Roman temples were circular, and the most natural form for a roof for such a building was that of a half globe, or a cup reversed. The invention, or at least the first use of this beautiful element of architecture is due to the Romans, and it has never been used since with greater effect, either scientifically or as an affair of taste, than by them.

The greater part of modern cupolas (unlike those of the ancients, which are mostly demi-globes or hemispherical), are semi-elliptical cut through their shortest diameter. The ancients seldom had any other opening than a large circle in the centre, called the eye of the cupola, while the moderns elevate lanterns and perforate them with luthern and dormant windows, and other disfigurements. The ancients constructed their cupolas of stone; the moderns of timber, covered with lead or copper, except Mr. Soane's fine cupola over the rotunda of the Bank of England. Of ancient cupolas, the finest, without any comparison, ancient or modern, is that of the Rotonda or Pantheon at Rome. Of modern constructions, the beforementioned cupola at the Bank, that of St. Peter's at Rome, those of St. Paul's, London, the Hotel des Invalides, and the Church of St. Genevieve at Paris, Santa Maria da Fiori at Florence, and at Santa Sofia at Constantinople.

Curator. [Lat.] *In ancient architecture.* A surveyor or overseer, inspector or commissioner of public works. The *curator aquarium* was, in the days of Augustus, an officer in whom great trust was reposed, being the surveyor of the waters that were consumed in the city, and the charge of the aquæducts and whatever appertained to them were under his care. See Aquæduct. The office of *curator aquarium* was established by Augustus, who invested the curator with many powers, and gave him a sufficient number of subordinate officers and slaves to perform the requisite duties. Frontinus, who held this post in the reign of Nerva and Trajan, has acquainted us with the duties and prerogatives of his office in his work on the aquæducts of Rome.

Among these duties, the curator had to put an end to many abuses that had arisen in the management of the aquæducts and public waters before his appointment, to visit every aquæduct in person, to examine their state, the quantity and quality of the water which they conveyed. He had also to make plans and models of all the aquæducts under his care, and for new ones when required. Hence his office in many instances resembled that of the modern civil engineer. He had under his command a sufficient quantity of sub-officers, and a great number of slaves as workmen and labourers, who were employed in building, repairing, and keeping them in order.

These slaves were divided into two classes or *familiæ* (gangs, retinues, or sets), as they were called. One of these was established by Agrippa in the reign of Augustus, and bore the name of *Familia Publica.* It consisted of about two hundred and forty members. The other, called *Familia Cæsaris,* was established by the Emperor Claudius, and consisted of four hundred and sixty members. These classes were again subdivided into various sections, and were named according to the duties which they had to perform. Those called *villici* had the inspection of the pipes, the directions of the cisterns or tanks, placed them in the *castellæ* or conduits, and took care that they should be of appropriate dimensions and diameters according to the nature of their required services. The *castellarii* or water bailiffs had the superintendance of the *castellæ* or water towers, and directed the supply of the waters as required. The *circuitores* perambulated the circuits of the aquæducts, and reported their state to the *curator.* The *siliciarii* had the care of the pavements under which the pipes ran, as well as of the pipes themselves, and of

the restoration of the paving when done. The *tectores* were the workmen or journeymen builders, whose duties were to build and keep in repair the piers, arches, walls, and other parts of the construction of the arched aquæducts. There were also other classes of these familiæ, whose duties were merely that of the common reparations or general maintenance of the aquæducts.

There were also other descriptions of *curators* among the Romans, such as *curator viarum,* surveyor of the roads or highways.

Curator coloniæ, inspector or superintendant of colonies, who superintended the people who were transplanted from the city or other overpopulous places to others, with allowances from the public treasury and of land for their support; by which means the city was disburdened of its multitudes, the poor were provided for, and the borders of the empire, whither they were for the most part sent, secured against the inroads of the enemy.

Curator kalendarii, the director of the kalendar; and *curator reipublicæ,* were officers of great trust attached to the upper order of the government. *Curator palatii* was the governor of the emperor's household, and, like our lord steward, was a situation of great honour, confidence, and patronage. The word *curator,* is also adopted in the English language, but is mostly confined to the universities and other literary and scientific institutions.

The *curator viarum* was an office of great dignity among the Romans. Julius Cæsar was the first person of high rank among them, who accepted the situation of curator of the public ways, which was afterwards rarely ever conferred, except upon those who were of consular dignity. THERMUS, a noble Roman, served this office, according to Cicero, and became curator of the Flaminian way, and was a colleague of Cæsar's. "Thermus," says he, in his first epistle, book i. to Atticus, "curator est viæ Flaminiæ: Quæ cum erit absoluta, sanè facilè cum Cæsari consulem addiderim." Pliny says in a letter to Pontius (lib. v. Ep. 15.) that the news of Cornutus Tertullus having accepted the surveyorship of the Æmilian way affected him with joy, "Recesseram in municitium, cum mihi nuntiatum est Cornutum Tertullum accepisse Æmiliæ viæ curam. Exprimere non possum quanto sim gaudio affectus, et ipsius, et meo nomine." Statius also in his Sylvarum (lib. 4.) ad Marcellum, puts among his eulogiums upon VICTORIUS MARCELLUS, who was of the prætorian order, that he had been selected by Domitian to be surveyor of the via Latina,

> "Quique tuos alio subtexit munere fasces:
> Et spatia antiquæ mandat renovare Latinæ."

He also mentions as a mark of similar dignity, that PLOTIUS GRIPPUS, whom he calls *majoris gradus juvenem,* had been entrusted by the same emperor with two of the most honourable offices of the empire, *præfectum annonæ, et curatorem viarum,* lib. 4. Sylvarum, in risu saturnalitio ad Plotium.

CURIA. [Lat. from Κυρία, Gr.] *In ancient architecture.* A court. The council house, or senate house of the Roman people. Being originally an edifice for religious services, it obtained its name, but at length becoming devoted also to secular purposes, it still retained it. There were several curiæ in the Roman empire as well as in the city. The *curia municipalis* was, according to Vitruvius, a state house or Guildhall, called also *domus curialis.* The *curia dominicalis,* an equivalent to our court baron or manor house.

The principal in the city of Rome were the *curia Hostilia,* which was the senate house that was built by Tullus Hostilius. There were two called after the king, first the *curia Hostilia vetus,* which, according to Asconius and Varro, was built by him near the Mons Palatinus. The other called *curia Hostilia nova* was built by Tullus Hostilius for the Albani. In it were originally held the meetings of the *curiales* or wards of Rome, which afterwards assembled in the comitium. See COMITIUM. It was situated on Mons Cælius, and was ascended to by a flight of stairs which Servius Tullius destroyed in a contest which happened between him and Tarquinius Priscus in this building. Sylla repaired them, and the Curia of Hostilius was reduced to ashes, according to Asconius, when they burned the dead body of Publius Clodius, the tribune of the people, that formidable enemy of Cicero, who was slain by T. Annius Milo. The people having collected the seats and benches of the notaries and public scriveners, the tribunals of the inferior courts, and the books of the librarians, they made so large a fire, that they not only burned the corpse, but also the curia itself, and melted several bronze statues that were about it. Faustus, the son of Sylla was commissioned to rebuild it, but he preferred erecting a small temple to the god Felicity. The *curia Hostilia* was not restored till the time of Julius Cæsar, who

began to rebuild it, and his nephew Augustus finished it, but gave it the name of *Curia Julia*, after his daughter Julia, and commemorated it by a reverse upon one of his denarii. After the banishment of this profligate woman by her father, it again resumed its original name.

The *Curia Pompeii* was erected by Pompey near to his theatre, in order that the senate might be enabled to assemble for the dispatch of public business on the days of the games, and also give their presence and authority to the shows. It was in this edifice that Julius Cæsar was assassinated on the Ides of March, at the base of the statue of Pompey its founder. Suetonius affirms that it was always closed after this event, or, as Appianus asserts in his history of the civil wars of Rome, was burned by the people.

Another of the *curiæ* of imperial Rome, was that in the neighbourhood of the Flaminian Circus, known by the name of the *Curia in Porticu Octaviæ*. There were also four inferior curiæ on the Mons Palatinus, between the arches of Titus and Constantine, called *Curiæ Foriensis Raptæ, Vellensis*, and *Velitiæ*.

CURIOSITY. [*curiositas*, Lat.] *In all the arts.* An object of elegance, finished workmanship, rarity, beauty, &c. Curiosities in art are works of whatever nature, that are not only elegant and valuable in themselves, but rare, or uncommon. Such as very highly finished cabinet pictures, antique sculptures, gems, jewellery, armour, arms, books, manuscripts, autographs, medals, medallions, vases, models, little columns of agate, jasper, fine marbles, &c.

CURTAIN. [*cortina*, Lat.] *In architecture.* The part of the wall of a fortification or rampart that is constructed between two bastions. Also a cloth or large veil, that can be contracted or enlarged at pleasure. In the interior of the houses, mansions, and palaces of the ancients, the entrances to the different rooms were seldom closed otherwise than by a curtain, or continuation of the arras or tapestry with which the walls were closed; and were called *velum cubiculare, aulæum*, &c. It was behind a curtain or arras of this description that Heliogabalus, according to Lampridius in his account of that tyrant, concealed himself when the soldiers sought to assassinate him for his crimes and tyranny. Suetonius describes a similar piece of domestic architecture, behind which Claudius concealed himself also, for fear of assassination upon the death of Caligula, when the soldiers drew him forth from his hiding place and proclaimed him emperor.

Among the ancients, when the prince gave audience, a curtain was drawn up from before the passage to his apartment, as a signal for entrance. The judges in criminal cases, which demanded serious investigation, were accustomed occasionally to have a curtain dropped during their discussions, to withdraw them from the eyes of the criminals and the people, while forming their decisions. This custom gave rise to the expression *ad vela sisti*, to denote an appearance before a bench of judges. On the contrary, in affairs of little importance, they kept the curtain raised, and they discussed the evidence and passed their judgments *levato velo* with a raised curtain, before the people.

In the temples of the ancients, they often suspended a curtain before the statue of the divinity, during the times when they were not sacrificing. In the temple of Jupiter at Olympia there was a curtain of extreme value, beautifully woven of wool, after the manner of the Assyrians, and dyed with the Tyrian purple; that was presented to the temple by Antiochus. There was also a similar curtain or veil in the celebrated temple of Diana at Ephesus. When they would discover the sacred statue to the wondering eyes of the adoring crowds that assembled within the walls of the temple, the curtain was lowered as in the temple of Jupiter at Olympia, or raised as in that of Diana at Ephesus. The veil of the virgin goddess of the Athenians is much celebrated by Pausanias and other Greek writers, which is described under the article Peplum. See PEPLUM. Stuart, in his Antiquities of Athens (vol. ii. p. 7 and 8), thinks that the ancient veil or curtain of the temple was for the purpose of covering the centre part of the hypæthros, which was unroofed. This sort of curtain differs from the *velarium* of the Romans that was used in their theatres and amphitheatres.

In the theatres of the Romans, they were accustomed to close the scene between the spectator and the actors by a curtain, which was raised at the commencement of the performance. It was called *aulæum* and *siparium:* Apuleius says *aulæum* when used for tragedy, and *siparium* when for comedy. It does not appear that the Greeks used the curtain in their theatre, except in the infancy of their drama. The *perispetesmata*, of which Pollux and Varro make mention, was nothing

but a curtain extended over the audience part of the theatre as a shade for the spectators.

When the curtain was to be withdrawn for the commencement of the drama, it was not raised as is the practice at the present day, but lowered. During the representation it was either left lying on the front part of the proscenium, hung over the hyposcenium, to which it became a species of ornament, or let down under the stage or proscenium by a trap. When the drama was finished the curtain was slowly raised, and the stage closed from the view of the spectators. The curtain was usually painted, and often with historical subjects, as Ovid mentions in the third book of his Metamorphoses (v. iii. et seq.). "When the curtain rises," says he, "the figures rise aloft; we see at first the faces, and then the other parts of the body successively arise, till their feet appear upon the floor of the scene." The Romans generally chose for the subjects of their painted curtains the most striking events of the last war in which they were engaged; with figures of their most popular heroes, and of the people whom they had recently conquered.

CURULE *(chair)*. See CHAIR (curule).

CUSHION. [*coussin*, Fr.] *In costume and domestic architecture.* A pillow for the seat of a chair, a couch, or a bed. In ancient times the soldiers reposed on sacks filled with wool, straw, or dry leaves; and cushions or mattresses were used in their dwelling houses and temples for various purposes. In a painting on a fine Greek or Etruscan vase, published by Millin in the first volume of his *Monumens inédits*, which represents the expiation of Orestes; he is represented as crouching down before the cortina on a cushion or mattress, formed like those of modern times. But, it is evident, on inspection, and on comparing it with the different passages of the poets which represent this subject, that it is merely a raised part of the floor of the temple covered with a carpet, that is laid over the cortina of the tripod before which Orestes is performing his expiatory duties, and taking refuge against the furies which are pursuing them. See CORTINA, TRIPOD, MATTRESS.

CUSTOMHOUSE. *In architecture.* A public building where the duties and customs upon goods imported or exported are collected. A customhouse should be situated near the port of a city, where it is both convenient of access for the shipping and to the mercantile residents thereof. It should consist of a grand and spacious quay, suitable warehouses for goods, wet docks for ships and barges, rooms for the chief and subordinate officers, halls of business, &c. &c. The best and most complete buildings of this nature are the customhouse at Bologna, designed and built by DOMENICO TIBALDI, son of the celebrated painter Pellegrino Tibaldi; that of London by Mr. LAING; and that of Dublin, perhaps the finest in design of them all, by the late Mr. GANDON.

CYBELE. *In the archaiology of painting and sculpture.* The goddess who presided over the earth. She is represented with a crown of turrets on her head, and was a goddess of the highest dignity and worship in the religion of the ancient Romans, by whom she was called Mater Pessinunte, Dea Syria, *alma mater deum, Sancta deûm genetrix, Domina, Mater, Mater cultrix*, &c. the mother of the gods, daughter of heaven and earth, the wife to Saturn, upon which account she is also called Ops, Rhea, and Vesta. Her priests were called corybantes, and among other ceremonies of her worship, accompanied themselves by the noises of drums, tabors, pipes, and cymbals. She is represented on ancient medals as sitting, and with a pine branch in her hand. The ancient poets and artists give her sometimes a chariot drawn by lions, in which Ovid (Met. xiv. v. 540.) describes her as descending from heaven to earth. See also Virgil, Æn. iii. v. 113. x. v. 253, and Lucret. ii. v. 609. She was also the goddess of shepherds, and was called by them *Magna Pales*. A celebrated statue of this goddess in stone was formerly at Pessinunte, which was brought to Rome, when all the matrons of the city went out as far as the mouth of the Tiber to welcome her. The next year a splendid temple was built for its reception.

CYCLES. [*cyclus*, Lat. Κύκλος, Gr.] *In the archaiology of art.* A round of time. See MYTHIC CIRCLE.

CYCLOID. [Κυκλοεῖδης, Gr.] *In architecture.* The form of an arch, the curve of which is mechanically constructed by taking a point in the circumference of a circle, and revolving it on a right line, the curve described by the point will be a cycloid. See ARCH.

CYCLOPEAN WORKS. *In ancient architecture.* Masonry performed with huge blocks of stone, much of which is to be seen in Sicily, said by modern imbeciles to be the works of an ancient and fabulous gigantic race of people; as Stonehenge is said by

our country people to have been built by the devil. Some of these works called Cyclopean were the walls of Argos and Sicyone. Near to Nauplea in Argolis there were caverns which, according to Strabo, were called Cyclopean. As servants of Vulcan, the Cyclops were celebrated in mythology and fabulous history for their marvellous works. See CYCLOPS.

CYCLOPS. [Lat. Κύκλωψ, Gr.] *In pictorial and sculptural mythology.* The Cyclops are fabled by the poets as being the sons of Neptune and Amphitryte, and assistants of Vulcan. Their chief employment was in the manufacture of thunderbolts for Jupiter. The three most celebrated are *Brontes* (the thunderer), *Pyracmon* (the fire and anvil man), and *Sterope* (the lightning).

CYLINDER. [*cylindrus*, Lat. Κύλινδρος, Gr.] *In the geometry of the fine arts.* A geometrical solid or cube having two flat sides and one revolving, like a garden roller, or a portion of the shaft of an unfluted column. The cylinder was reckoned a sacred form among many nations, particularly those of the east. Many of the mystical deities of the ancient nations that inhabited Hindustan and its neighbourhood were figured as cylinders of wrought and sometimes unwrought stone. Their *lingam* was also represented under the same form, and concealed in the darkest recesses of their obscure temples and sculptured caverns. A rude cylinder of this description served even an ancient people for a statue of the goddess of Love herself. These mysticisms had allusions, there can be no doubt, to the procreating power of nature. Sir William Jones has treated the subject with profound knowledge in his inimitable discourses delivered before the Asiatic Society. See that work, 2 vols. 12mo. London, 1821.

Pliny describes a valuable precious stone, of a cylindrical form, which, he says, the artist formed of that shape, rather than that of the ordinary form, because it was naturally of that shape; but it is more likely that it had allusion to the above quoted mystical allusions. In cabinets of ancient gems many of this form are to be found pierced throughout longitudinally, which occasions Millin to think that they were worn as amulets. They are mostly engraved upon their periphery with long and meagre figures, of a singular mode of costume, and accompanied by Persepolitan characters similar to those found at Tchelminai, or Persepolis. Archaiologists have regarded them as originally belonging to Persepolis or the ancient Suza, the residence of the former kings of Persia before the conquest of their kingdom by Alexander the Great. Among these singular stones some are parallelopidons, but the greater part are cylindrical. Their materials are mostly jasper, turquoise, hæmatite (the most usually met with), lapis lazuli, and agate. Bianchini has given an engraving and description of one of a curious cylindrical form in his universal history. Caylus has engraved and described eight, seven of which are in the royal collection at Paris. There are also specimens of them in the British Museum; and the late Mr. Townley and Mr. Akerblad had also several. Besides the abovenamed works of BIANCHINI and CAYLUS, the inquirer is directed to RASPE's Catalogue of the casts from gems by Tassie.

CYMA. [Lat. Κῦμα, Gr.] *In architecture.* Billowing, swelling; also a young shoot of a plant or herb. Used as the name of an undulating moulding, which is generally the upper one to a cornice, and is then called cymatium. See CYMATIUM. There are two sorts of cymæ, the *cyma recta*, which is composed of a concave and convex moulding, the former being uppermost in the shape of the Roman letter S; and the *cyma reversa* where the convex moulding is uppermost.

CYMATIUM. [Lat. Κυμάτιον, Gr.] *In architecture.* The upper moulding of a cornice, so called because it is generally formed of either a *cyma recta* or *reversa.* Vitruvius alludes to cymatii, the *Doric* and the *Lesbian.* The French and Italian architects call this compound moulding gola, gueule, and doucine, a throat. The *cymatium* is also used to the heads of modillions, and constitutes part of them, as likewise it enters into the composition of the abacus, and on pedestals, as in the stylobata corona, and the base thereof, but in both are inverted.

CYMBALS. [*cymbalum*, Lat. Κύμβαλον, Gr.] *In the archaiology of the arts.* Musical instruments of brass, used in the worship of some of the ancient deities. According to Servius they were particularly dedicated to Cybele.

CYMBIUM. [Lat. Κύμβιον, Gr.] *In the archaiology of the arts.* An ancient drinking vessel, fashioned like a boat.

CYNOCEPHALIS. [Lat. Κυνοκεφαλίς, Gr. ex Pl. XIII. c. 2, called also *cercopithecus*, Κερκοπίθηκος, *simia cum cauda.*] *In the archaiology of the arts.* A large kind of ape or baboon, approaching to the form of a dog; under which form and name the Egyptians worshiped their god *Anubis*,

the son of Osiris. The Egyptian Mercury, who was hence called by Virgil and Ovid, *Latrator* the barker; by Plutarch *Hermanubis;* and by Lucan *Semicanis deus.*

CYPRESS. [*cyprus*, Lat. Κύπρος, Gr.] *In ancient architecture.* The wood of a tall straight tree much grown in the island of Cyprus. Its leaves are bitter, and its smell and shade deleterious. Hence the Romans looked upon it to be a fatal tree, and used it in their funeral ceremonies, besides covering the gate of the house of the deceased with its branches. It is also the emblem of mourning, and dedicated to Pluto. It was valued by ancient architects and carvers, as being a solid heavy wood, of an aromatic smell, which preserves it a long time from decay, and is never worm eaten. The door posts of the palace of Menelaus are described by Homer as of Cyprus; which is also the material on which the laws of Solon are said to have been engraved.

There were in ancient Rome several celebrated statues carved of cyprus, among others one of Vejovis or Vejupiter, placed between the citadel and the capitol; another of Juno Regina, which they carried in solemn procession during the calamities which happened in the war with Hannibal in Italy.

CYZICENUS. [Lat. Κυζικος, Gr.] *In ancient Greek architecture.* The name of a species of large and splendid halls, superbly decorated with architecture and sculpture, so called by the Greeks after the inhabitants of Cyzicus, a town of the Propontis, who were celebrated for the magnificence of their buildings. The cyziceni of the Greeks much resembled the cœnaculi of the Romans. See CŒNACULUM.

D.

DACIA. *In the history of the arts.* A country situate beyond Hungary, whose inhabitants were often at war with the Romans, till their signal defeat by Trajan, which is commemorated on his column. See COLUMN TRAJAN. This important conquest, which reduced Dacia from the government of a long line of powerful kings, to the situation of a Roman province, is often alluded to in the epigraphs upon the medals and coins of Trajan. VAILLANT has published an engraving from a Greek medal, which also refers to this event. Upon various Roman medals of the times of the emperors, Dacia is represented as a female sitting near to a trophy, exhibiting marks of sorrow at her fallen state. On some she is represented with the Phrygian bonnet, and on others a species of curved sword, such as was used by the Dacians, while on some she has a palm or an ensign.

DACTYLIOGLYPHS. [from Δάκτυλος a finger, and Γλύφω I engrave.] *In antique gem sculpture.* An engraver of stones for finger rings. Many of the ancient gem sculptors, having inscribed their names upon their works, they have descended with their reputations to the present day, and prevented many controversies in regard to the artists.

DACTYLIOGRAPHY. [from Δάκτυλος, and Γράφω I write.] *In the history of the arts.* A description of engraved finger rings and precious stones.

DACTYLIOLOGY. [from Δάκτυλος, and Λογος a discourse.] *In the history of the arts.* The science which describes or treats upon the history, nature, and qualities of engraved gems for finger rings.

DACTYLIOMANCY. [from Δάκτυλος, and Μαντική the art of divination.] *In the history of the arts.* A species of divination by finger rings, made under the aspects of certain constellations, accompanied by certain charms and magic characters. Ammianus Marcellinus describes another sort of dactyliomancy, which consisted of suspending a ring by a thread over a round table, on which were various characters and all the letters of the alphabet. The ring was put in motion, and the letters or signs over which it stopped, when joined together, formed the required answer. Superstitious people of the present day practise a species of dactyliomancy, by suspending a ring by a hair or very thin thread, in the circuit of a glass, which they say will always strike the hour of the day.

DACTYLIOTHECA. [Lat. Δακτυλιοθήκη, Gr.] *In ancient architecture.* A cabinet or case to contain finger rings and engraved gems. The use of rings was very common among the Greeks, both as an ornamental part of their dress, and as seals. A collection of such was, therefore, an appendage to all persons of wealth and consequence. The first collections of precious stones or jewels that we are acquainted with in ancient Rome were made as early as the times of Scaurus and Pompey; but there is nothing to indicate that they were engraved. Mithridates had a dactyliotheca, which, on his defeat by Pompey,

was consecrated in the capitol by his conqueror. Cæsar established several in the temples of Venus and Marcellus, an extensive one in the cell of the temple of Apollo Palatinus.

Among the moderns, Lorenzo di Medici is the first who made an extensive collection of antique engraved gems, which was considerably augmented by Cosmo, and several of his successors. This collection formed a portion of the superb gallery of Florence. The stones which composed the part collected by Lorenzo are for the most part marked with his initials L. M.; and others have upon their mountings or settings a laurel, with the legend *semper viret*, the cipher and devise of that celebrated family. The *dactyliotheca Florentina* has been enlarged and augmented by various successors of its princely founder. They have been engraved and published by Gori in the *Museum Florentinum*. The once celebrated collections of Barberini and of Odescalchi are no longer in existence. The latter belonged originally to Christina, the celebrated Queen of Sweden, and have been engraved in the *Museum Odescalchi*.

The Cardinal Borgia possesses at Velletri a fine collection of antique engraved stones, celebrated particularly for the set of Scarabæii and of Egyptian stones. The *dactyliotheca Farnese* now belongs to the King of Naples. That of the Strozzi contains some of the finest examples of the art, such as the *Hercules* of CNEIUS, the *Medusa* of SOLON, the *Medusa* of SOSTHENES, the *Esculapius* of AULUS, the *Germanicus* of EPITYNCHANUS, the *Muse* of ALLION, the *Satyr* of SCYLAX, &c. Gori has described the greater part of them in his *Museum Florentinum*, because the Strozzi family was originally of Florence, and resided in that city; but their *dactyliotheca* was kept in Rome, whence it could not be removed under the penalty of its forfeiture. The *dactyliotheca Ludovisia* is one of the most celebrated in Rome, and belongs to Ludovisi Buon Compagni, Prince of Piombino. Besides the fine *Demosthenes* of DIOSCOURIDES, it possesses several of the finest antiques and specimens of the sixteenth century. The collection of the Vatican was formed more by chance and at random than by a connected design, and contains specimens of great size and high value.

The most considerable collection in Germany is that of Prussia, began by the Elector Frederick William, and augmented by Frederick II. from the collection of Baron Stosch, of which Winckelmann has published a catalogue. If the Prussian collection has the advantage on the score of erudition, that of Vienna has the preference in point of art. It has cameos of the largest size and of immense value. ECKHEL has published engravings of its principal beauties. The senate of Leipsic has a good collection of antique gems. The King of Denmark possesses in his palace at Copenhagen some fine antique vases of sardonyx, and others enriched with cameos and intaglios, some of which are modern, by the celebrated Laurence Natter, who resided and followed his art in the palace. The King of the Netherlands has also a good collection in his palace at the Hague.

The imperial cabinet at St. Petersburgh boasts of a splendid dactyliotheca. The principal gems of which were formed by the acquisition of the collection of Natter, who died at St. Petersburgh; by that of the celebrated Orleans collection, by the Strozzi, and by purchases from private collections. A catalogue of them has been published by M. KOEHLEN. Among the most valuable and rare of this splendid collection are some vases of Sardonyx. The *dactyliotheca Poniatowsky* at St. Petersburgh is also rich in sculptured gems of the highest value.

The most celebrated collections in England are those belonging to the Dukes of Devonshire, Bedford, and Marlborough, and the Earls of Carlisle and Besborough. The Marlborough collection boasts of the beautiful *Marriage of Cupid and Psyche*, by TRYPHON. Its best gems have been engraved by Bartolozzi.

Many of the churches in France, before the revolution, had collections of sculptured gems; and there was also some private collections of value; the principal of which were those of M. D'Ennery and the Count Caylus. The best, however, is the dactyliotheca of the Royal Library at Paris, which is a large collection both of antique and modern workmanship. M. MARIETTE has published engravings from the intaglios of that cabinet, but has not exercised much judgment or discrimination, having given modern performances for antiques, and those which are executed by Bouchardon have no resemblance to the beauty of the antique style. Some of the cameos, such as the apotheosis of Augustus, which formerly belonged to the holy chapel, the fine sardonyx vase, which was taken from St. Denys, and the apotheosis of Germanicus, have been published separately. Others of them have been published by A. L. MILLIN in his

Monumens inedits. This fine collection, besides the fine specimens just mentioned, possesses also the very fine *Achilles Citharœdus* of PAMPHILUS, the *Mecænas* of DIOSCOURIDES, the *Dionysiac Bull* of HYLLUS, the *Griffin* of MIDIUS, the *Julia* of EVODUS, the *Jupiter Ægiochus* that was found at Ephesus, an *Indian Bacchus* upon a topaz, superb portraits on sardonyx, and a long set of modern portraits of celebrated characters.

As it is impossible to form all the fine antique engraved gems into one cabinet, a collection of impressions or casts from them are curious and useful. These collections are of great value and assistance in the study of history, of archaiology, and of the fine arts. PICKLER has formed a collection of such casts taken from the finest specimens. LIPPERT has also published a collection of four thousand casts, accompanied by a well written descriptive catalogue of the subjects. It is known by the name of the *dactyliotheca* LIPPERTI. Casts and impressions of this kind are on common sale in Italy, from the finest antiques. TASSIE of Leicester Square, in London, has executed the largest collection of casts yet known, amounting to more than fifteen thousand, of which a catalogue has been published, drawn up by Rasp, whose name has occurred before in this article. The cabinet of antiques in the Royal Library of Paris has a large collection of casts from antique gems of the finest description, which is being augmented every day.

The publications on this subject are principally those of CHIFLET on *Abraxas.* See ABRAXAS. GORI *sur les Pierres Astriferes;* FICORONI *sur les Pierres qui portent des Inscriptions;* GORI *sur les Pierres gravées;* the *Museum Florentinum,* by the same author; the *Galerie de Florence,* par WICAR, et Mongez; the *Museum* D'ODESCALCHI; *Description des Pierres en Creux du Cabinet du Roi,* par MARIETTE; *les Pierres du Duc d'Orléans,* par LE BLOND et LACHAUX; *les Cabinets de* GRAVELLE, *de* CRASSIER, *de* STOSCH, *de* BOSSI, *du Duc de* MARLBOROUGH; *le Recueil de* CAYLUS; *l'Antiquité expliquée de* MONTFAUCON; the *Museum Romanum;* a chapter entitled *Dactyliotheca* in the *Recueil d'Inscriptions,* par MURATORI.

DADUCHUS. [Lat. Δαδοῦχος, Gr.] *In the archaiology of sculpture.* Literally a torch bearer, but applied as an epithet to many of the ancient divinities, who were always represented as bearing a torch or flambeau. *Duducus* also designated those persons, who in certain ceremonies and religious processions carried the flambeaus or sacred torches. The Daduchic deities are, *Ceres,* when represented as searching for her lost daughter Proserpine; *Diana, Luna, Hecate,* and *Sol,* when in their cars employed in the business of lighting the earth; *Venus, Cupid,* and *Hymen,* when bearing the torch of love; *Rhea,* or *Cybele,* and *Vesta,* in the temples where the vestals guarded the sacred fire of those goddesses; *Vulcan,* in whose honour, conjointly with Prometheus and Pallas as *Daduchi,* the Athenians instituted a festival which they called Lampadephoria Λαμπαδηφορία (see LAMPADEPHORIA); *Bellona,* the *Furies, Aurora, Hymen, Peace* on a medal of Vespasian; *Comus* in an ancient painting described by Philostratus; *Night, Sleep,* and *Death* or Thanatus Θάνατος; and are always, when represented as Daduchi by the ancient poets or artists, described as bearing flambeaux.

DÆDALEIAN. [*dædaleus,* Lat. Δαίδαλεος, Gr.] *In all the arts.* Artificial, skilfully made, expert, workmanlike; so called by ancient writers after Dædalus, the most ingenious artificer of the ancient world; whence the proverb *Dædali opera,* Dædalian arts, when they meant to commend a work for its ingenuity and excellence. They also used the phrase *Remigiis Dædaleis* to signify any thing done with dexterity and speed. The name of this skilful projector is also an adjective implying excellence with Latin authors, as *Dædala tecta* by Virgil; *Dædala tellus* and *Dædaleus* by Lucretius; *Dædaleus* and *Dædalus* by Horace and Propertius; and *Dædal* in the same meaning by Dr. Johnson in his Dictionary.

DÆDALUS. [Lat. Δαίδαλος, Gr.] *In ancient architecture.* A name of the labyrinth of Crete, so called from Dædalus its architect.

DAIRY. [from *dey,* an old English word for milk.] *In architecture.* A building appropriated to the purpose of preserving and managing milk, skimming cream, making butter, cheese, &c. with sometimes the addition of pleasure rooms for partaking the luxuries of the dairy, as syllabubs, cream with fruit, iced creams, &c. Mr. PAPWORTH in his tasteful designs for rural residences appropriately says, "When the fashionable amusements of the town are relinquished for those of the country, there are few so interesting to the female mind as the dairy. Perhaps the poets have given a sentiment to all that belongs to pastoral life; or, in its own nature, the means of supplying pleasurable ideas may have a real existence: indeed

it is probable, that nature and the poet may have combined to give a relish for an amusement that is equally engaging and healthful, and taste has not failed to add its influence in favour of this subject, for there are few residences, whose possessors have been acknowledged to lead in the walks of polished fancy or pictorial beauty, where the dairy has not formed an agreeable feature in the order of its rural offices."

Woburn Abbey, the seat of the Duke of Bedford, and one of the completest specimens of the mansion of an English nobleman of taste and refined intellects, possessing every advantage that art and nature can bestow, has a dairy of considerable beauty and utility. It is a handsome Chinese building, on the margin of a lake, ornamented with stained glass, and possessing a character both for beauty and rural economy.

DALMATICA. [Lat.] *In ancient costume.* A species of tunic with sleeves, which descended to the wrists, and brought into Rome from Dalmatia, whence its name *Dalmatica vestis.* The Emperors Commodus and Heliogabalus, in wearing the dalmatica, dishonoured themselves in the eyes of the Romans, who regarded all men as effeminate who concealed their arms in the long folds of a tunic. The tunic with sleeves was the characteristic dress of those effeminate nations, which the Greeks and Romans designated as barbarians. The latter have commemorated their hatred both of the dress and people in their Caryatides and Persians, who are all clad in this sort of long sleeved tunic.

DAMASKENING. [*damasquinure*, Fr.] *In the arts of chasing, engraving, and sculpture.* The art of working ornamental metals in various devises, as originally practised at Damascus. The art of inlaying or incrusting iron and steel, called damaskening in later times, was by no means unknown to the ancients. The Egyptians practised it with success, at least under the times of the Grecian and Roman kings, as may be witnessed in many of their antique statues, where the eyes, the necklaces, and other ornaments are inlaid in silver. The workmanship of the Isiack table, that celebrated antique Egyptian monument, which contains the figures and mysteries of Isis, is of bronze, incrusted with silver, and in some parts damaskenated; but in others the silver is so thin that there can be no doubt but its makers were acquainted with the art of silvering as at present practised.

The Greeks were also acquainted with this art; it is mentioned by Herodotus, who calls it kollesis (Κόλλησις). Its invention is attributed to Glaucus of Chios, who made the celebrated damaskenated vase that Alyattes, King of Lydia, sent to the temple of Delphos. The Romans were also acquainted with this art, which they called feruminatio; they also used the phrase *argentum aut aurum includere.* The people of the Levant are celebrated among modern artists for this kind of workmanship. The French in the reign of Henry IV. were also skilful in this art, and much of their ornamental armour is in existence as a proof.

DAPHNEPHORIÆ. [Lat. Δαφνηφόρος, Gr.] *In archaiology.* Festivals that took place every nine years in Bœotia, in honour of Apollo Ismenius. The origin of these fetes is said to have been as follows: the Æolians, having commenced ravaging the territory of Thebes, then being besieged by the Pelasgi, a festival of Apollo occurring, occasioned a suspension of arms, during which one party gathered the laurels that were necessary in the ceremonies, on the banks of the Helicon, the others on those of the Melas, and they all performed the ceremonies together. Polemathas, chief of the Bœotians, had a dream that a young lad appeared to him and presented him with a complete suit of armour, desiring him to consecrate every nine years, a feast of laurels to the same deity; and in three days defeated the enemy.

DAPIFER. [Lat.] *In the history of the arts.* An officer in the household of the Roman emperors. His duty was to place the first dish on state occasions before the emperor. The title *dapifer Cæsaris* occurs on a medal described by MURATORI.

DARICKS. [*daricus*, Lat.] *In numismatics.* An ancient gold coin, bearing the image of Darius. They generally bore the figure of an archer discharging an arrow; whence they were often called sagittarii. Xenophon speaks of them and also of demidaricks. They are very rare, and of extremely fine gold.

DATE. [*datte*, Fr.] *In the history of the arts.* The time at which any work of art was executed, or when any event recorded thereby happened, or when any person represented thereby lived. They are generally referrable to *dates* of *persons*, of *facts*, and of *places*, and are gathered from inscriptions, style, manner, and other authentic marks belonging to them. The art of verifying the dates of antique works of art is one of the greatest importance, and

belongs to the most intricate branch of critical chronology.

DEATH. [Deaϑ, Saxon.] *In painting and sculpture.* The extinction of life. The image of mortality variously represented by different poets and artists. The personifications of this inevitable power, by the poets, vary according to their mythological belief. As the ancients had more gloomy notions of death than we have, their descriptions and personifications are more dismal and frightful. Death, as personified in the book of Revelations and in Milton, is as terrific and inexorable a tyrant as can be imagined; but his terrors are only held up to the evil doers. The personification of death or *mors*, by ancient artists, are very rarely to be found. The most remarkable is a small brass statue at Florence, of a skeleton sitting on the ground, and resting one of his hands upon a long urn. Neither death nor sleep appear among the numerous personifications of the accidents of human life that are met with in the celebrated pictures of the Vatican Virgil. Death is not to be found on ancient medals, for no artist would venture to place a vicious or hurtful being on the medal of an emperor, though ever so monstrous; and as for the virtues they are all to be found on the medals of the emperors from Nero to Commodus, by way of compliment. The personification of evil beings, for the same reason, are almost as uncommon. Mors, or the personification of death, was probably more common in ancient pictures, because she is frequently mentioned by the poets, who make a distinction between *lethum* and *mors*. Perhaps by *lethum* (see Petr. v. 263.) was meant the general source of mortality residing in Orcus; and by *mors*, or *mortes* the *immediate cause* of each instance of mortality. That the ancient poets had several personifications of this universal power is plain from Statius, (lib. ii. Sylv. 7. v. 131. Theb. viii. v. 24). He describes one like *quies*, (lv. Sylv. 3. v. 261), in speaking of his father who died in a lethargy. Virgil also calls her *dura quies*. Statius describes another death (or *mors*) as giving in her tale of ghosts to the rulers of the lower world. Theb. iv. v. 529. He speaks of her as like to be confined from doing mischief in a dark prison.

The poets describe death personified by *mors* as being ravenous, treacherous, and furious; and as roving about open mouthed, and ready to swallow up all that come in her way. They give her black robes and dark wings, and make her often of colossal stature. From the epithets *pallida* and *lucida*, *pale* and *wan*, she seems to have been represented with a face and meagre body, instead of the bare scull and skeleton of some of our modern painters, like the dance of death by Hans Holbein. The dead pale colour of her cheeks seems to be meant by Lucretius (vi. v. 1271.) when he calls her *mors exanimis*. Statius (Theb. i. v. 633.), in a pestilence, gives her a sword, but there is no other instance of her being so armed. The artist who wishes farther description of this allegorical personage, is referred to Lucretius V. v. 222. Her. Fur. cap. ii. Chor. Œdip. act. i. Chor. Stat. Theb. viii. v. 378. Sil. xiii. v. 350. 845. Ovid ad Liv. v. 360. Hor. l. ii. Sat. i. v. 58.

The description of death by the ancients was more frightful and dismal than that of modern artists and poets. They describe her as coming and thundering at the doors of mortals, to demand the debt they owe her. Sometimes as approaching their bedsides, and sometimes pursuing her prey, or as hovering in the air, and ready to sieze it. *Mors* is also represented like the gladiators called *retiares*, pursuing men with a net, as catching and dragging them to their tombs; or, as surrounding persons, like the hunters of old, with her toils, and as encompassing them on every side. Phæd. l. iv. epil. Hor. l. i. od. 4. v. 14. The expression of knocking at the door is used by Proserpine and Bellona, by Ovid in his heroic epistles (ep. 21. v. 46. ad Liv. v. 361. Am. iii. el. 9. v. 38.), by Statius in his Thebaid (viii. v. 349 and 378), by Lucretius (l. iii. v. 492.), by Horace (l. iii. od. 2. v. 16. l. iii. od. 24. v. 9). The way of hunting here described as pursued by death, by enclosing a great number of beasts, is very distinctly described by Statius. Achil. i. v. 466. Plutarch (in vit. Alex. Stat. l. v.) speaks of toils twelve miles in length. This custom came from the east, where it is still practised. The author of the 116th Psalm, v. 3. speaks in a similar figurative style, of being encompassed by the snares of death.

The most picturesque description of this deity to be found in the ancient poets is where Statius (l. ii. Sylv. 6. v. 79.) represents her by the side of a youth in the flower of his age, attended by envy and vengeance, or Nemesis. These terrific deities show great friendship to one another in the execution of their purpose, and vengeance in particular seems, by the account, to take the net out of death's hand, and to perform her office for her.

A representation of this terrific deity

presents greater difficulties to the artist than to the poet. The former has more to fear of falling from the sublime to the ridiculous, as may be proved by delineating to the eye many of the poets' personifications and descriptions addressed to the ear. Of English artists, MORTIMER and WEST, in their pictures of death on the pale horse, have succeeded the best. The former, however, gave the first idea of the meagre cadaverous body, and pale and wan face, in the stead of the bony skeleton of Roubillac in Westminster Abbey, and the dancing skeletons of Holbein. Roubillac's death aiming his lance at Mrs. Nightingale is, however, the most animated skeleton ever imagined or executed by art. FLAXMAN has also, in two or three of his mural monuments, delineated the Christian idea of death, unvictorious over immortality, with an artistlike correctness of feeling.

DECASTYLE. {*decastylus*, Lat. Δεκάστυλος, Gr.] *In architecture.* A temple, portico, or building, having ten columns in front. See ARCHITECTURE, ORDONNANCE, PORTICO, TEMPLE.

DECORATION. [*decoratio*, Lat.] *In all the arts.* Ornament; added beauty. The art of decoration, whether of painting, sculpture, or architecture, is divided into many branches both *liberal* and *mechanical.* Among the former are the ornamental parts of painting, design in sculpture, and the ornamental designs of architecture; and among the latter, house painting, paper hanging, carving, gilding, &c. When a nation is at peace, enjoying repose, wealth, and civilization, and all its absolute wants gratified; the people begin to exhibit symptoms of a taste for embellishment and decoration, and practice it upon their dwellings, their vestments, their arms, armour, furniture, and domestic utensils. Decoration arises again from various causes; such as the distinctions of ranks and dignities among men; the natural dislike to monotonous uniformity of objects of use or luxury; the pleasure arising from an agreeable variety of form, disposition, and ornament; an imitation of the ornamental and decorative parts of nature.

The sentiments that give rise to the passions of love, religious devotion, and moral culture in general, also inspire mankind to decorate the objects of their attachment. Ornaments belong to the art of decoration, and are an essential part, when applied with taste. Mankind in all ages, whether civilized, or of that class that some please to call savage, have ornamented and decorated the statues of their gods, and of their friends; their houses, their temples, and all that belongs to devotion or enjoyment. See ARABESQUE, ARMS, GROTTESQUE, CONTRAST, ORNAMENTS, TROPHIES, &c.

DECORATOR. An adorner. A practiser of the art of decoration, an inferior sort of artist. Among those inferior branches of the fine arts, which appertain to the decoration of the superior departments, the decorative or scene painter stands among the most prominent. Their art is mostly practised with body colours, mixed with size and water, and is called destemper painting. See DESTEMPER, SCENE PAINTING. The *decorator*, or *painter-decorator*, is also much employed in the interior of palaces, mansions, and splendidly finished dwelling houses, in decorating the walls with destemper paintings in landscape, history, imitations of bassi rilievi, trophies, arabesques, &c. The Italians have many able artists in this class, and have produced many excellent designs in this evanescent style of painting. Decorators are also in much request at ceremonials of royal marriages, coronations, and public fetes and festivals.

DECURSIO. [Lat.] *In numismatics.* A tournament. On several bronze medals of Nero are representations of two mounted horsemen, of which one is carrying a spear, and the other a military ensign. On others are the emperor on horseback, preceded and followed by a soldier, one bearing a lance and the other an ensign as before. Both of which sorts of medals are inscribed with the word DECURSIO, designating a cavalcade in small companies or troops, commanded by a *decurio* to every ten horsemen; which was a favourite arrangement of Nero's, who thus exercised the prætorian guard, as related by Suetonius and Dio Cassius. The Romans also had *decursions* of bigæ, and quadriadrigæ in the Circus Maximus, which are commemorated on their contorniate medals.

DECUSSIS. [Lat. from *decem assis.*] *In numismatics.* A Roman coin, or piece of money of the value of the Roman penny, and which bore on that account the numeral letter X. The type of the decussi was a head of Minerva, with sometimes the prow of a vessel, a victory driving in a biga, and often the inscription ROMA.

DEDICATION. [*dedicatio*, Lat.] *In the history of the arts.* The act of dedicating, or appropriating solemnly, a temple, a statue, or other work of art to any particular deity, person, or purpose, which, because it was performed by the augurs, was call-

ed *inauguration*, and was called "inaugare templum," consecration. The Greeks and Romans accustomed themselves to dedicate monuments and other works of art of every description to their divinities. Titus made a grand and solemn dedication of his celebrated amphitheatre, called the Colosseum, to his father Vespasian. See Colosseum. The Romans engraved upon the frontispieces of their public monuments the name of the persons who dedicated them; as on the frieze of Agrippa's portico of the Pantheon. It was reckoned a great honour to be chosen to dedicate any important monument. The only honour that was wanting to complete the fortunes of Sylla, says Tacitus, was that of having dedicated the capitol, which was reserved for Lutatius Catulus.

The custom of dedication, or rather consecration, has passed through the religion of the church of Rome into that of England, and is similar in both churches, that of consecrating the edifice to the worship of God, and dedicating it to the name of a saint. See Consecration.

Deliack. [*deliacus*, Lat.] *In sculpture and numismatics.* A kind of sculptured vases, also beautiful bronze and silver, named from the island of Delos.

Delicacy. [*delicatus*, Lat.] *In all the arts.* Nicety. Minute accuracy. Delicacy in painting is the opposite to strength or force, and particularly belongs to the miniature and cabinet style. In sculpture it means high finish, smallness, and effeminate beauty. In architecture, tenuity of proportion, highness of finish, and fineness of materials.

Delos. [Lat. from Δῆλος, Gr. i. e. perspicuous.] *In the history of the arts.* An island in the Ægean sea, being the chief of the Cyclades, where Latona was delivered of her twin children, Apollo and Diana; to whom, therefore, the island was ever after consecrated, and held to be a place of so great a sanctity, that the Persians, when they made war against Greece, and had brought to Delos a navy of a thousand sail, yet out of reverence to the patron deities, forebore attacking the island. The ancients supposed it to have been once a floating island, and it was therefore called by Ovid *erratica Delos.* It was not allowed to bring up a dog in the island, nor to bury any dead body, nor to bring forth children; wherefore if any one were sick or pregnant, they were removed to some of the neighbouring islands. It was also called Ortygia, Asteria, Cynthia, Lagia, Chlamydia, Cynethus, and Pyrpile.

Delos was celebrated in ancient times for the number and the excellence of its artists, and the school which it founded. Pliny says that the bronze of Delos was excellent and much esteemed. The island was also celebrated for the fineness of its silver, which the Delians used with great skill and taste in the formation of various utensils, vessels, statues of their gods, of heroes, animals. The statue of Jupiter Tonans in the capital was of Delian bronze. Cicero, in his oration for Roscius, has many eulogiums upon the fine vases of Delos and Corinth. The temple of Apollo at Delos was one of the most celebrated of its time in all Greece.

Delphos. [Lat. Δελφὸς, Gr.] *In the history of the arts.* An ancient city of Phocis in Greece, seated on Mount Parnassus, where was a celebrated temple and oracle of Apollo, that was consulted by the inhabitants of all Greece. This oracle was celebrated for the Pythia or Pythonissa, who, seated upon the mystic tripod, delivered the answers from the god according to the enthusiasm with which she was inspired. See Cortina.

Delubrum. [Lat.] *In ancient architecture.* A portion of a temple particularly set apart to the especial service of the god, or the reception of the shrine or statue. Some critics suppose that the delubrum was that part of the temple where the worshippers washed themselves prior to entering the body of the edifice; deriving its etymology from *deluo* to wash clean, delubrum, in the manner of polluo pollubrum. Others with Varro think it the inmost recess, or most private part of the temple. Its most probable etymology is *Dei labrum*, id est *locus*, as a place in which a candle is inserted, was called by the Romans candelabrum. It is, however, sometimes used for the temple itself, as Ammianus Marcellinus, in speaking of the capitol, says "Jovis Tarpeii *Delubra*," at others for a portion as "Proserpinæ tabula fuit in Capitolio, in Minervæ *delubro*;" and Pliny uses it for one of the three portions of the temple in a sense equivalent with the cell. See Ædicula, Cell, Temple.

Demitint. [*demi* and *tint.*] *In painting.* A gradation of colour between positive light and positive shade, less pedantically called half tint. See Half tint, Painting.

Demon or Dæmon. [*dæmon*, Lat. Δαίμων. Gr.] *In the mythology of the arts.* A good or evil spirit. The etymon of dæmon means wisdom, science; and in the dark days of ignorance and superstition, the few enlightened men who cast rays of

intellect around their benighted brethren were reckoned of a superior order of beings, and called dæmons, or wise men, and were held to hold intermediate situation between the gods and the human race. They were also called Genii. See GENIUS.

DEMOSTHENES, lantern of. *In architecture.* A building in Athens falsely so called. See CHORAGIC MONUMENTS.

DENDRACHATES. [Lat. Δενδραχάτης, Gr.] *In gem sculpture.* A precious stone of the agate kind, so called by Pliny and other ancient natural historians, from having streaks or herboraceous marks in its substance.

DENTELS. [*dentelli*, Ital. from *dens* a tooth, Lat.] *In architecture.* Small members in the shape of cubes, somewhat resembling teeth. They are used principally in the Ionic and Corinthian orders. See ARCHITECTURE, ORDER, CORNICE.

DENTICULI. [Lat.] *In numismatics.* Sometimes called *nummi serrati.* Ancient coins or medals with toothed or a sawlike edge.

DESCRIPTION. [*descriptio*, Lat.] *In all the arts.* The act of describing or marking out pictures, statues, buildings, coins, medals, engravings, &c. by intelligible properties. Good descriptions of works of art, or collections of antiques, are valuable and interesting additions to the cabinet, picture gallery, and library. They are mostly in the form of catalogues, either nominal or descriptive; the latter have generally the titles of catalogues raisonnés. See CATALOGUE, COLLECTION, DACTYLIOTHECA.

DESIGN, to. [*designo*, Lat.] To plan, to project, to form in a rude draught.

DESIGN, a. [from the verb.] *In all the arts.* The idea which an artist endeavours to execute or express. It is also, somewhat loosely however, used synonymously for to draw, or drawing. Designs in architecture are made either geometrically, or according to geometrical rules and proportions; or perspectively as they appear to the eye. In painting they are mostly made on paper, in light and shade or colours, or on canvass with oil colours, and are then called sketches. See DRAUGHTSMAN, DRAWING.

DESTEMPER. [*détrempe*, Fr.] *In painting.* A sort of painting with opaque colours, ground and diluted with water and gluten; used in decorative and scene painting. When on a small scale, on paper or pasteboard, it is called body-colour painting; which is a style that has almost disappeared before the superior qualities of the English school of painting in water colours. Destemper painting is executed on plaster, wood, canvass, parchment, paper, &c., and is reckoned the most ancient mode. The pictures that have been discovered in the ancient Egyptian temples and tombs, and on many ancient bassi rilievi in Italy, are all painted in this manner. Destemper paintings will endure for a great length of time, if kept from damp and the external air. The colours are brilliant and do not change, and their effect is much increased by a bright light. They are therefore the best for theatres, ball rooms, and such apartments and rooms as are mostly used by artificial light, not having the glossiness of oil or varnished paintings. Destemper when on walls or cielings differ from fresco, by being executed after the walls are dry, while fresco is performed while the plaster is wet, and is embued to a considerable depth therein. See FRESCO.

DETACHED. [*detaché*, Fr.] *In painting.* Figures, buildings, trees, &c. are said to be detached, when they are painted so as to appear standing out from the back ground, in a natural manner; and that the other parts appear in proper relative situations. This is to be acquired by a study of nature, and of the laws of perspective, particularly of that branch termed aërial. See ÆRIAL, PERSPECTIVE.

DETAILS. [*detail*, Fr.] *In all the arts.* Minute and particular parts of a picture, statue, or building, as distinguished from the general conception, or larger parts of a composition. A proper management and due subordination of the details of a work of art is of the greatest importance to its effect and value. The extreme finish of the details engenders a littleness of style, like the portraits of Denner, and the worst parts of the French school of art; while a neglect of them often argues ignorance of execution to perfection. Details are often accessorial, and should therefore be subordinate to the general idea that is wished to be conveyed by the composition, whether in painting, in sculpture, or in architecture. See ACCESSORIES. If the details are laboured, they encumber instead of enriching the work they are intended to adorn. In architecture this error is most fatal, and if overloaded will beget heaviness, and take off the attention of the spectator from the artist's intentions. The great artists of antiquity finished their details with care and knowledge, but never elevated them by an overstudious ostentation of finish to the dignity of principals. The Elgin marbles are existing proofs of this position.

Device. [*devise*, Fr.] *In painting and sculpture.* An emblem or metaphor, which represents one object by another which bears some resemblance to it. Also, a motto, a fanciful composition of small size, composed of attributes rather than principals. See Attributes. Also the emblem used on a shield to indicate the rank, person, family, derivation of the wearer, or of the nation to which he belongs. The heroes of Greece wore different devices and inscriptions upon their shields. See Shield, Inscription. The Theban warriors carried the emblem of a serpent for their device, to indicate that they derived their origin from the serpent's teeth, that were said to have been sown by Cadmus the founder of their city and race.

Æschylus has described in his "Seven chiefs against Thebes," the bucklers of the chieftains, by the dramatic agency of the soldier, who is communicating to Eteocles the names of the seven heroes, who are selected to attack the gates, and the description of their appropriate armour. Their bucklers bore both devices and inscriptions. That of Capaneus had the figure of a naked man armed with a torch, inscribed in letters of gold, "I will burn Thebes." Upon that of Eteocles, a warrior scaling a castle, saying, "Mars himself shall not repulse me." On that of Polynices, the brother of Eteocles, the figure of himself led by Justice, bearing for his motto, "I will reestablish him in the city and palace of his father."

The usage of these devices was thus practised by the people of the earliest antiquity; but they did not use them to the extent of some modern nations, mostly affecting a greater clearness in their inscriptions, and placed their allegories in images. Of modern devices, that of the representation of a fish, indicating through the initials of its Greek name ΊΧΘΥΖ, the sentence, Ιησȣ̃ς Χριςός Θεȣ ῾ΥὸΣ, is the most celebrated, and perhaps the most perfect device or anagram extant. The Α and Ω placed on each side of the cross is rather more to be considered as a monogram than a device. See Monogram.

Father Lemoyne considers the French to have been the inventors of devices, which is certainly untrue; but that they have used them to a considerable extent is well known. They have been the foundations of modern heraldry, which has been carried to great perfection by that people. Some of them are very clear and intelligible, such as the figure of a star, with the motto "Monstrant regibus astra viam," which were the device of the knights of the order of the star, instituted by the French King John. The representation of a fowling piece, with the inscription "Ante ferit quam flamma micet," of the Dukes of Burgundy. René of Anjou, King of Sicily, having lost his wife, to whom he was much attached, took for his device the figure of a bow, with its string snapped in twain, with the Italian motto "Arco par lentar, piagia non sana." Valentine of Milan, wife of the Duke of Orleans, who was assassinated at Paris by the orders of the Duke of Burgundy, assumed, after his death, for a devise, the emblem of an empty watering pot, with the words "Plus ne m'est rien, rien ne m'est plus." Louis XII. assumed the figure of a porcupine, inscribed "De loin et de près," to intimate his power of wounding close or at a distance. Devices may in this manner be composed upon most occasions, but they are in many instances only pictorial punning, alike removed from good taste and genius in art. See Allegory, Emblem.

Diadem. [*diadema*, Lat. Διάδημα, Gr.] *In ancient royal costume.* An imperial or royal crown or tiara, an emblem of royalty, worn by ancient monarchs. The most ancient diadem was originally a white fillet, bound round the heads of emperors and kings. Pliny and Diodorus Siculus attribute the invention of the diadem to Bacchus; who, according to the latter author, wore one as an antidote to the head aches arising from the fumes of wine. As this bandage was termed mitre, the jolly god received from it the name of mitraphora. A head of Bacchus thus attired is to be seen on the medals of Tarentum and Naxos. The heads of Neptune, of Hercules, of victory, and of other ancient divinities, were also represented encircled by the diadem. This ensign of royalty was also very early adopted by the ancient kings. In the earliest examples the diadem is very narrow. Alexander the Great, says Justin, adopted the larger and more decorated diadem of the kings of Persia, of which the extremities came down to his shoulders, which mark of sovereignty was continued by his successors. Some ancient queens are also represented with the diadem, to which is added the veil. The first kings of Syracuse abstained from the use of the diadem; and Diodorus expressly says that Agathocles took not this distinctive mark of royalty, although he knew that Alexander's generals, who succeeded to his divided kingdom, thus decorated themselves; which has given occasion for some critics to think that the

medals which bear the diademed head of his predecessors were not struck till after their decease.

The early emperors of Rome did not assume the diadem, because they knew it was odious in the eyes of the people. Constantine the Great is considered as the first who adopted it, enriched and decorated with precious stones, pearls, and other ornaments. It became, during the time of the lower empire, one of the emblems or insignia of the imperial dignity; and, in modern times, although its form differs from that of the crown, *the diadem* is often used as synonymous with *crown*.

DIADOUMENOUS or DIADEMATUS. [from *diadem*.] *In the history of ancient sculpture.* The name of a celebrated statue carved by Polycletus, which represented a youthful hero encircling his brows with a diadem.

DIÆTA. [Lat. Δίαιτα, Gr.] *In ancient architecture.* A set or suit of apartments; also a supper room; and a place where judgment was sometimes given, a council room; which the Germans still retain in calling certain of the councils *diets*. Pliny in his villa at Laurentum uses the word *dietæ* in the first sense.

DIÆTULA. A smaller kind of diæta.

DIAGLYPHON. [Lat. Διάγλύφον, Gr.] *In ancient sculpture.* The name by which the Greeks designated works in sculpture when sunk in with the chisel. Among the most celebrated of these were the buckler and pedestal of a colossal statue of Minerva at Athens. When it was in relief, the work was called Anaglyphic. See ANAGLYPHIC.

DIAGONAL. [*diagonios*, Lat. *Vit.* vi. 3. Διαγώνιος, Gr.] *In the geometry of the fine arts.* A line which reaches from one angle to another, in any quadrilateral figure.

DIAGRAM. [*diagramma*, Lat. Διάγραμμα, Gr.] *In painting and architecture.* A figure drawn to demonstrate any mathematical or graphical scheme.

DIAGRAPHICÆ. [Lat. Διαγραφική, Gr.] *In the history of the arts.* The name by which the Greeks and Romans called the art of design or correct drawing; and which, among them, always formed a part of a good education. It held with them the first place among the fine arts. Pliny (iii. 10.) gives this name to the art of painting on box.

DIAMETER. [*diameter* or *diametros*, Lat. Διαμετρος, Gr.] *In architecture.* The line which, passing through the centre of a circle, or other curvilinear figure, divides it into equal parts. Also the largest part of the shaft of a column, which is taken and used by most architects as a scale or standard of measurement. See COLUMN, MODULE.

DIAMOND. [*diamant*, Fr.] *In gem sculpture.* The hardest and most valuable of all the gems. Diamonds are of various colours, but the colourless, which is the sort mostly used in the arts, is, when pure, perfectly clear, and pellucid as the purest water. Hence the phrases, the water of a diamond, a diamond of the finest water, &c. The colourless diamonds are not, however, the most common. The rarest colours are blue, pink, and dark brown; but yellow diamonds, when the colour is clear and equal throughout, are very beautiful and much valued. Pale blue diamonds are also very fine and rare, but deep blue still more rare. There was a small diamond of this colour in the collection of the late Mr. Greville, before it was purchased by the British Museum; and a very fine one in the possession of Mr. Eliason, which is said to be worth thirty thousand pounds. Diamonds of uncommon size and rarity of colour cannot be valued by the rules which apply to common cases. The large diamond in the possession of the Great Mogul weighs two hundred and seventy-nine carats (a carat is equal to three grains two-fifths troy weight), and is computed to be worth seven hundred and seventy-nine thousand two hundred and forty-four pounds sterling. The large diamond in the sceptre of the Emperor of Russia was purchased by the Empress Catherine, for about ninety thousand pounds ready money, and an annuity of four thousand pounds more. It is about the size of a pigeon's egg, and weighs a hundred and ninety-three carats. But the largest diamond hitherto found is in the possession of the Rajah of Mattan, in the island of Borneo, where it was found about eighty years since; it weighs three hundred and sixty-seven carats. It is described as having the shape of an egg, with an indentation near the smaller end. Many years ago the Governor of Batavia tried to purchase it, and offered in exchange one hundred and fifty thousand dollars, two large brigs of war, with their guns and ammunition, and other cannon with powder and shot. But the Rajah refused to part with a jewel, to which the Malays attach miraculous powers, and which they imagine to be connected with the fate of his family. This diamond is mentioned in the memoirs of the Batavian Society.

The diamond is the hardest of all known substances. Nothing will scratch it, nor

can it be cut but by itself. By cutting, it acquires a brilliancy and play of lustre that much augments its price. Diamonds are found in the East Indies, in the kingdoms of Golconda, and Visapoor, in the territory of the Mogul, and in other Asiatic countries. Towards the beginning of the eighteenth century diamonds were found also in the Brazils. Some writers have affirmed that these latter are less hard and perfect than those of the East Indies; and that the oriental diamond assumes more particularly the octahedral form in its crystallization, while those of the Brazils that of the dodocahedron; but Haüy asserts that these differences of structure and hardness have not been proved. Crystallized diamonds to the mineralogist, and to aid the science of crystallography, are of much value, but not costly, as some of the most curious crystals are the smallest. Some of them are rough and nearly dull externally. In Miss Lowry's Conversations on Mineralogy are some very curious specimens, described and engraved from real stones, one (pl. xi. fig. 390.) is in form a rhomboidal dodecahedron, arising from an octahedron, and exhibits the laminæ of superposition very clearly. The most common forms of diamonds are octahedral, variously truncated, and mostly with convex faces; there being a great tendency to convexity in most crystallizations of the diamond. The edges of the octahedron are seldom truncated by a single plane, but in general by two narrow convex surfaces (pl. xi. figs. 391 and 392).

The hardness of the diamond was well known to the ancients; its name both in Greek and Latin (ἀδάμας, *adamas*) implying invincible hardness. They conceived that it would yield neither to fire nor hammer, and yet believed that it could be dissolved by goat's blood. Modern science, however, has acquainted us that it not only yields to fire, but is actually an inflammable substance, and is ranked in the first genus (carbonaceous) of the inflammable class, being pure carbon. It was conjectured by Boetius de Boot to be an inflammable substance as long ago as in 1609; and in 1691, and in the following year, they were burnt in the presence of the Grand Duke of Tuscany by means of a strong lens. Sir Isaac Newton does not appear to have been acquainted with these experiments, but he suspected that it might be combustible from its very great refracting power. Because the diamond is in this respect very analogous to amber; which, as other vegetable resins, is very inflammable. Dr. Brewster has confirmed the relation, which Newton supposed to exist, between the refractive power and the inflammability of substances, by his experiments on phosphorus and sulphur; and his investigation of the properties of the diamond have led him to conclude, "that it has originated, like amber, from, perhaps, vegetable matter, which gradually acquires a crystalline form by the influence of time, and the slow action of corpuscular forces." Edinburgh Philosophical Journal, vol. iii. p. 98.

The ancients did not confine the word adamas to indicate the diamond alone, but applied it to other hard and *adamantine* substances. They were unacquainted with the art of cutting the diamond, satisfying themselves with those which were polished naturally; but knew of the property of its powder or dust for cutting, engraving, and polishing other stones; as is fully proved by Pliny's fabulous account of dissolving it for the lapidary's use in hot goat's blood, and by the great perfection to which they carried the art of gem sculpture by its means. It is only surprising, that knowing the power of the diamond by its points and powder over other stones, that they did not essay it upon itself. Among the diamonds in the British Museum there is a very ancient gold ring, generally believed to be Roman, in which an octahedral diamond is set, which is a natural crystal; and the four diamonds which ornament the antique clasp of the royal mantle of Charlemagne, belonging to the kings of France, and kept in the Abbey of Denis, are also natural diamonds, unpolished by art and uncut.

The art of cutting and polishing the diamond was unknown in Europe till the fifteenth century. Before that period, rough and unpolished ones were set as ornaments, and valued according to the beauty and perfection of their crystallization and transparency. This art is said to have been invented and first practised in 1456, by Louis de Berquen, a native of Bruges. Charles the Bold, Duke of Burgundy, was one of the first princes of modern times who affected a great splendour in diamonds. He is represented in a portrait, which forms the frontispiece to a manuscript in the Royal Library at Paris, wearing in his hat the superb diamond known by the name of *sancy*, which was taken among his other treasures by the Swiss, after the battle of Granson.

Among engraved or sculptured diamonds is one with a head, which Gori falsely imagined to be antique, and called

it a portrait of Posidonius. It belonged to the Duke of Bedford. Lessing thinks that many of the engraved antique gems, which are called diamonds, are nothing but amethysts, sapphires, and emeralds, deprived of their colour by the operation of fire. M. Gurlett thinks that the ancients were acquainted with the art of engraving upon diamonds, and that if we have but few examples, it arises from their seldom using so valuable a stone. But if they knew not the art of cutting and polishing the diamonds, it is natural to conclude, in the want of better evidence, that they were equally ignorant of the more difficult art of engraving upon so hard a substance; although some impostors have endeavoured to pass bad sculptures on diamonds for genuine antiques.

Jacques de Fresso appears to have been the first who engraved upon diamonds; yet Mariette names Clement de Biragues as the first in 1564. Others assert that Ambrose Charadossa engraved in 1500, one of the fathers of the church for Pope Julius II. Natter and Costranzi, both eminent gem sculptors, engraved upon diamond. However, the greatest artists in this delicate and beautiful department of the fine arts have been above losing their time in working upon so hard and untractable a substance, which at the same time they were deteriorating in value, as none but diamonds of a large size are suitable to their art, by diminishing its weight and size.

Diamonds are also valuable for many other purposes. Their powder is not only the best for the lapidary and gem engraver, but at the same time, is more economical than emery, or any other material for cutting, engraving, and polishing hard stones. They are also employed by glaziers, who cut out glass with them for windows; by glass cutters in cutting lookingglasses, and other useful articles in window and plate glass. The glazier's diamond is set in a steel socket, and attached to a wooden handle about the size of a thick pencil. It is very remarkable, that they can only use the point of a natural crystal for this purpose; cut or split diamonds will not cut glass properly; they scratch it, but the glass will not break along the scratch, as it does when a natural crystal is used.

An application of the diamond, of great importance in the art of engraving, has been also made within a few years by the late Wilson Lowry, the eminent engraver, and first inventor of the mechanical methods now used in that part of the process called etching. He applied them to the purpose of drawing or ruling lines, which are afterwards to be deepened by aqua fortis. Formerly steel points, called etching needles, were used for that purpose; but they so soon became blunt by the friction against the copper, that it has always been impracticable to make what are called flat or even tints with them; such as the azure parts of skies, large architectural subjects, and the sea in maps; but the diamond being turned to a conical point, or otherwise cut to a proper form, is not worn away by the friction of the copper, and consequently, the lines drawn by it are all of equal thickness. The diamond etching points of Mr. Lowry are turned in a lathe, by holding a thin splinter of diamond against them, as a chisel.

Diana. [Lat. from Διὸς, qu. *Joviana*, the daughter of Jove.] *In mythological painting and sculpture.* The daughter of Jupiter by Latona, and twin sister of Apollo, who with her was born in the island of Delos. See Delos. She has three names, either because of the three offices that are attributed to her, or, because the poets confound three of their deities into one. She hath also been represented with three heads, and therefore called the triple goddess, triple Hecate, from ἑκὰς (quia longe dominatur) Diana triformis, &c. She was called *Luna* (a lucendo) in heaven, where she is reckoned the moon, receiving light from her brother Apollo, the sun; on earth she was called *Diana*, the daughter of Δ'ι or Jupiter; and in hell she was called *Proserpina*. She is also called Cynthia from Cynthos, a mountain in Delos, where she was born, and Delia from the island of Delos.

As *Diana*, she is the goddess of hunting, and called *Diana Venetrix*. She is always represented by the ancient artists and poets as armed with a bow and arrows, and three score nymphs in her train. She is often represented as running, as in the fine marble statue in the Townley gallery of the British Museum, with her vest flying back and girded about her. She is tall of stature, and her face though handsome is rather manly. Her legs are bare, well shaped, and strong. Her feet also sometimes bare, and sometimes adorned with the cothurnus or buskin of the hunters. See Cothurnus. She has a quiver on her shoulder, and holds either a javelin or a bow in her right hand. Thus she appears in some of her antique statues, and in the descriptions of the ancient poets, who often, by a single epithet, bring the idea of her whole figure to the mind. The student is referred for example to guide

him in a correct delineation of the Diana Venetrix, to Ovid, Heroic Epistles, iv. ver. 40. 91. b. i. el. 1. ver. 12. Fast. ii. ver. 156. Art of Love, iii. ver. 144. l. iii. el. 2. ver. 32. Virgil, ecl. vii. ver. 32.

The statues of this Diana were frequent in the woods, where she was represented as hunting, or bathing, or resting herself. It was on one of these occasions that Actæon had the misfortune to see her bathing so fatally to himself. The story is told on an antique gem in Maffeis' collection, by Ovid in verse, and by Apuleius (Asin. Aur. l. ii.) in prose. Both the poet and the artist represent the nymphs as gathering round the naked goddess to conceal her; but, as Ovid observes, it was partly in vain, as she was so much taller than her nymphs. This majestic statue was finely expressed, says Pliny (Nat. Hist. lib. 35. cap. 10.), in the celebrated picture of this goddess by Apelles, who formed his idea of it from Homer's description (Odys. Ξ. v. 108.), and even, says Pliny, surpassed his original. Virgil has imitated the same description (Æn. i. ver. 582). Statius also (Theb. iv. ver. 433.) gives a beautiful description of her as resting herself, that would make an excellent statue or picture.

The *Diana triformis*, called also Hecate and Trivia, by Ovid, Horace, and Virgil, when her statues stood where three ways met, is represented by the above poets with three heads, and sometimes with three bodies. She was frequently invoked in enchantments, as being the infernal Diana, and appears more like a fairy than a celestial goddess.

As *the celestial Diana*, she is described by Statius (Achil. i. ver. 348.) as of majestic stature; and in the council of the deities, retaining her bow and the quiver on her shoulders. This description agrees with a statue that belonged to the late Lord Leicester. Cicero (Orat. iv. in ver.) describes a statue also much like it which once belonged to Scipio Africanus.

As *Luna*, or the moon, Diana is represented on ancient gems, medals, and bassi rilievi, with a lunar crown or crescent on her forehead (see CRESCENT), armed with a bow and arrows, in a silver chariot drawn by two white stags or does, sometimes by two horses, one black, the other white. Some poets speak of both her horses as perfectly white. See Propert. iii. el. 20. ver. 18. Hence Horace calls her Regina bicornis (Carm. Sæc. ver. 35). She is also thus described by Statius (Theb. i. ver. 338.), Ovid (Fast. iv. ver. 372. v. ver. 16). On a gem in the Florentine collection, she is drawn by two heifers, a particular not noticed by the poets of the first ages. It was this Diana whom the poets feigned to have fallen in love with Endymion, whom Jupiter had condemned to a perpetual sleep for his intrigue with Juno, or as others say by Luna herself, that she might kiss him unknown. If this fable be considered, it may perhaps appear to have been a philosophical amour, or rather a platonic love, that did not interfere with her character of chastity, or her petition to Jupiter in Callimachus for perpetual virginity. She is often represented on antique sculptures as descending to a shepherd asleep, with a veil over her head. By this, a line in Flaccus (Argon. viii. ver. 31.) becomes not only clear, but very expressive, and finely descriptive of her appearance. Probably this fable might have originated from a personification of the eclipses of the moon; if so, her veil would be the most significant and characteristic part of her costume. See also Catullus de Comâ Berenice, lv. iv. ver. 6. The fable of Endymion, who was enjoyed by his mistress while asleep, gave rise to the Greek and Latin proverbs Ἐνδυμίωνος ὕπνον κάθεύδεις, and Endymionis somnum dormis, to indicate a sleepy and slothful fellow.

Among other of her names and epithets, some for her qualities, and others from the places where she was worshiped, are, Artemis Ἄρτεμις from ἀρτεμὴς perfecta et incorrupta virgo; DIANA *Taurica, Persia, Minthia, Ephesia, Torensis, Lycea, Sospita,* or *Sotera* the dispenser of health, *Leucophryne, Saluminia, Alphedia, Euclea, Jaculatrix, Venatrix, Triformis,* χθονία (the terrestrial), Θηρητειρα (the huntress or destroyer of wild beasts), therefore also named Lya or Lua. Τίταυις, Βρομία, Ἀγροτέρια, *Pharea, Daphnæa,* Μογοσόκος. Orpheus calls her Ἄρτεμις, Εἰλείθμα, *Acrea, Coryphæa, Diana, Trivia, Alphæa, Caryatis, Iphigenia, Elymaitis, Priapina, Bubastis, Elæa,* &c. Homer calls her *Parthenon,* Ἰοχέαιραν, Ἀπόλλωνος, &c.

The Hall of Diana in the Louvre at Paris is embellished with several pictures and bassi rilievi of subjects taken from the history of that goddess. The subject of the picture on the cieling is taken from the before quoted hymn by Callimachus, which represents Diana asking Jupiter to leave her in the class of virgin goddesses, painted by Proudhom. The two circular pictures are Diana granting to the entreaty of Hercules the hind with the golden horns, by Garnier; and Diana recalling Hippolytus to life at the request of Aricia.

The bassi rilievi represent—1st. Orestes carrying off the statue of Diana Taurica, by Petitot; 2nd, the Lacedemonian virgins celebrating the festival of Diana at Thyreus, by Cartellier; 3rd, Diana and her nymphs soliciting Vulcan to forge their arms, by Espercieux; 4th, Amazons dancing round the statue of Diana at Ephesus, by Foucou.

Among the ancient representations of this goddess are the well known Diana Venetrix, of the Towneley collection in the British Museum, the before quoted antiques in the Florentine and other galleries, some fine antique bassi rilievi that were formerly in the Napoleon Museum at Paris, one that was No. 323, in the Hall of Silenus in the Louvre, of Diana and Endymion; and 418, a fine sarcophagus with a bassi rilievi of Diana and Actæon.

DIANIUM. [Lat. from Diana.] *In architecture.* A temple, wood, or other place dedicated to the goddess Diana. Also the name of a city of Tarraconium (Arragon) in Spain. The most celebrated structure of this kind was the temple at Ephesus, that was reckoned by the ancients to be the greatest among the seven wonders of the world. It was built by Ctesiphon, and enlarged and enriched by every succeeding king, till it was burned by Erostratus, the same night that gave birth to Alexander the Great. So engaged, say some of the ancient poets, was Diana, in her capacity of Diana Lucina, that she quite forgot her temple. It was built, according to Dionysius Periegetes (in Descrip. orb. 826), upon a moorish ground for fear of earthquakes. It was four hundred and twenty-five feet long, and two hundred and twenty feet wide. It was said to have had a hundred and twenty-seven columns of peculiar beauty and worth, presented by as many monarchs. It was rebuilt by Dinocrates at the expense of Alexander the Great, and was of the Ionic order. The priests of this goddess, who at Ephesus was called Ἰοχέαιρης (who joyed in the sports of the chase), were, according to Plutarch, divided into three classes; Μελλίερη, novices just entered into the office; Ἱέρη, priests; and Παρίερη, those who were grown old in the service, and superannuated.

Another celebrated temple of the goddess was that of Scythia Taurica, whence Orestes, and Pylades, at the command of Apollo, brought away the statue of the goddess, and Iphigenia, the sister of Orestes, who was detained as a priestess by Thoas, the king and high priest. According to Eschylus, quoted in the article Architecture, who mentions "the vacant place between the triglyphs," it must have been of the Doric order. Other Diania are mentioned among the titles of the goddess, under the last head. See DIANA.

DIASTYLE. [*diastylos*, Lat Διάστυλος, Gr.] *In architecture.* One of the five manners of intercolumniations used by ancient architects, having three diameters between the columns. According to Vitruvius it was the third species, and comes between the systyle and aræostyle. See INTERCOLUMNIATION.

DIATONI or DIÂTONIC STONES. [*diatonus*, Lat. Διάτονοι, Gr.] *In ancient architecture.* According to Vitruvius, cubical wrought stones used in construction by the Greek architects, with two wrought faces, to be used in coignes and angles, as corner or bond stones. They were proportionably longer than wide, and as wide as the thickness of the wall in which they were inserted. When used as corner stones they are returned on both faces in the form of a Roman ∟, the interior angle being cut away for the better security and bonding of the angles.

DIATRETARIUS or DIATRETARIUS CELATOR. [Lat.] *In ancient sculpture.* An artist whose business it was to engrave, chase, or emboss sculptural and other ornaments on the vases called *Calyces diatreti.*

DIAZOMA. [Lat. Διάζωμα, Gr.] *In ancient architecture.* A term used by Vitruvius to indicate the landing or resting places in the stairs of the amphitheatres and theatres. They were so named from their resemblance to cinctures or bands, as their name implies.

DICASTERIUM. [Lat. Δικαστήριον, Gr. judiciale forum, from Δικη justice, punishment.] *In ancient architecture.* The name of a tribunal in Athens where the people sat in judgment upon criminals of their own class, and took cognizance of involuntary murders. It is said to have been instituted by Demophoon, and was likewise called το δικάστηριον επι Παλλαδίῳ. In the early times it was not required to be a native of Attica who was to sit at this tribunal; the Argians being admitted also to that honour. But Draco afterwards excluded the Argians, and admitted only Athenians. The judges of this severe tribunal were fifty-one in number, and were to be at least fifty years of age; they were chosen from the most respectable persons of the ten tribes, from each of which five citizens of an irreproachable life, to whom one drawn by lot was added. Solon took from it the cognizance of certain important causes, which he transferred to the Arei-

opagus, to increase the authority of that court. The judges of the dicasterium were called Ephetæ, from the verb ἐφιεναι to appeal; because appeals were made from inferior tribunals to this. The situation of the dicasterium is not correctly ascertained, but it is probable that it was one of the superior popular courts that assembled in the Pnyx. Its form, situation (near the Areiopagus), and its pulpitum being in every respect calculated for such a purpose.

DICTYOTHETON or DICTYOTON. [Lat. Δικτυωτὸν, Gr. i. e. *reticulata structura.*] *In ancient architecture.* A species of building made like lattices or net work, to admit air and light; also, the name by which the Greeks, according to Pliny and other ancient authors, designated that species of walling called by the Romans *opus reticulatus.*

DIDORON. [Lat. Διδορων, Gr.] *In architecture.* A Greek measure of two spans.

DIE. [*dé*, Fr.] *In architecture.* The cubical part or body of the pedestal, between its base and cornice; so called as being in general a perfect cube or die. In monumental, commemorative, or honorary columns, like those of Trajan, Antonine, London, &c. the die is generally ornamented with sculptures in relief of subjects connected with the construction of the column.

DIGLYPH. *In architecture.* A species of ornament which has two channels sunk in, while tryglyphs have three. Vignola claims the honour of the important invention.

DILETTANTI. [Ital.] *In the criticism of art.* An admirer or lover of the fine arts; one who delights in their pursuits. The word is almost synonymous with amateur (see AMATEUR), but does not imply so much practical knowledge. We have a *society of dilettanti* in London, to whose good taste and liberality the world of art is indebted for some of the finest importations of knowledge of the grandest works of Grecian art. Such as the antiquities of Attica, Ionia, and other parts of Greece, and a volume of rare specimens of ancient Greek sculpture. They have also a series of portraits of their members in their council room in St. James's Street, many of them by Sir Joshua Reynolds, as every member, on his election, must present his portrait by an eminent artist; and a valuable collection of architectural drawings, views, maps, &c. made in Greece for the society by Messrs. F. Bedford and J. Gandy, under the direction of Sir William Gell, which it is hoped they will one day publish. A catalogue of this collection is in the third volume of Annals of the Fine Arts, page 478. It is highly to the honour of the Dilettanti Society that without any support from the public, or any funds but what have arisen from the liberality of its members, the only two literary expeditions which have, during a period of eighty years, been sent out from England for the purpose of investigating the remains of Grecian taste and splendour, have sailed at their expense.

DIMACHUS. [Lat. Δίμαχα, Gr.] *In the history of painting and sculpture.* A gladiator who combatted in the amphitheatres with two short swords or poinards.

DIMENSIONS. [*dimensio*, Lat.] *In all the arts.* The definite bulk or size of a picture, a figure, a statue, building, column, or other work of art. Grandeur in art does not result from largeness of dimensions, but more from an observance of harmony, proportion, and character. A colossus or a colosseum may be *little* in style though mountainous in size; and a Theseium, or a gem, *large* in style, though but a toy in dimensions. As the exact size of life is rarely exactly kept in every respect, particularly in painting, the artist must study proportion, both actual and relative, and greatness of style, if he wishes to soar above the shackles of actual dimension.

In architecture the word *dimension* or *dimensions* is equivalent with *measure, measurement* or *admeasurement*, and relates to the actual size of every part of the edifice.

DIMINUTION. [*diminutio*, Lat.] *In architecture.* The contraction of a diameter of a column as it ascends. The diminution of a column, in following the example of nature in the formation of the trunks of trees, the most ancient sort of columns, gives real as well as apparent strength and beauty to its form. For the diminution of the shaft of a column the following rules, principally taken from Vitruvius and the best remains of ancient architecture, may be observed. If the shaft of the column be fifteen feet high or thereabouts, divide the bottom diameter into six equal parts, each of which will be ten minutes, and take five for the top diameter; making its diminution five minutes on each side. If the columns be from fifteen to twenty feet high, the lower diameter is to be divided into six parts and a half, and five and a half of those divisions given to the top diameter. If the columns are to be from twenty to thirty feet in height, the lower diameter is to be divided into seven parts; six of which are for the upper diameter. If the columns are to be from

thirty to forty feet in height, the lower diameter is to be divided into seven parts and a half; and six and a half given to the top diameter. If they are to be from forty to fifty feet in height, the lower diameter is to be divided into eight parts; and seven appropriated for the upper diameter. If the columns are to be of loftier dimensions, they are to be diminished in similar proportions. This additional thickness to the upper part of columns as they increase in height is properly given by the best architects, on account of the increased height; for, as the eye is attracted by beauty, it is necessary it should be flattered by the pleasure it receives from proportionate and just distribution of parts, as it is when deceived by judicious additions; else the whole will have a bulky and inelegant effect.

The diminution of a column in some inelegant examples commences from the very bottom of the shaft, sometimes from a quarter and sometimes from a third of its height, forming, in some of the best Greek examples, a graceful, elegant, and almost imperceptible swell, which is called entasis. See Entasis.

Dining-room. *In architecture.* A room set apart for the purpose of dining. This apartment should be spacious, lofty, and easy of access. Northern or eastern aspects are among the best for a dining-room, as it is not generally used till the latter portion of the day, and the more cheerful aspects are best to be reserved for the morning and more general living rooms. The dining-rooms of the ancients are best described by Vitruvius (lib. vi. cap. 10). In one of the largest Grecian houses this able writer on architecture describes the common dining-rooms for the family as being under the porticoes of the peristyle, and in the portico which looked to the north, the cyzican triclinium or chief dining-room; and the pinacotheca, or picture and statue gallery. On the right and left also of the mansion or main building small houses were erected, having proper gates, dining-rooms, and convenient chambers, that when strangers arrive they may not enter the peristyle, but be received into this hospitalium; for when the Greeks were more refined and opulent they prepared triclinia (dining-rooms), cubicula, or chambers (see Cubiculum), and provisions for strangers; the first day inviting them to dinner, afterwards sending them poultry, eggs, herbs, fruits, and other productions of the country. Masters of families, therefore, when they abode in this manner, seemed not to be from home, enjoying the full liberty of retirement in these apartments.

The triclinia or dining-rooms of the Romans, with the procœton, or room for attendants; the cubicula, with the baths, &c. were disposed on the sides of the Cavædium. Vitruvius directs that the winter dining-room and bath should look to the winter's declining sun, because the afternoon light is there useful; besides, the western sun shining thereon produces heat, and makes that aspect warm and pleasant in the evening. The spring and autumn dining-rooms (for the luxurious Romans had one for every season of the year) should look to the east, for the windows then being turned from the sun, which is proceeding westward, render those rooms temperate at the time they are generally used. The summer dining-room should look to the north, because this aspect is not like the others, rendered hot at the summer solstice; for being turned from the course of the sun, it remains always cool, and when used is salubrious and pleasant.

Pliny describes the dining-rooms at his Laurentinum as being beyond the portico, through a pleasant cavædium, and which advanced upon the shore, so that it was gently washed by the waves when the south wind blew. On every side were folding doors or windows as large, so that from the sides and the front he enjoyed a prospect, as it were, of three seas, and backwards were to be seen the cavædium, the portico, and the area; again the portico and atrium terminated by woods and distant mountains. On the left of the triclinium, but not so forward, is a large cubiculum, and then a smaller one, where one window admits the rising, and another the setting sun. From hence you view the sea rather more distant, but more securely. This cubiculum and dining-room, by their projection, formed an angle, which not only retained but augmented the heat of the sun's rays. On the right side of the dining-room was a most elegant cubiculum, with another large cubiculum, or moderate cænatia (common eating or supper-room), which receives light both from the sun and the sea.

Dioclesian's Palace. *In architecture.* See Palace.

Dionysia. [Lat. Διονύσια, Gr.] *In archaiology.* Feasts instituted and celebrated in Greece in honour of Bacchus, so called from his Grecian appellation Dionysius; and observed with more solemnity at Athens than in any other part of Greece. In this festival they carried a vase full of

wine, adorned with vine branches, after the vase a kid and a basket of figs, and after them the *phallus*. They who celebrated this festival were clad with skins of mules, crowned with ivy and vine, and carried the thyrsus, flutes, and cymbals; some conducted the Bacchanals disguised as Silenus, Pan, and the Satyrs; others, mounted on asses, strayed over the hills and through deserts, leaping and crying with dreadful howls, Ευοι σαβοι, Ευοι Βακχε, ιω Βακχε.

There were two kinds of Dionysia; the great festival, which was likewise called Διονυσια κατ' αυ, because it was celebrated in the city. It took place in the spring, and was accompanied with public games. The less pompous festival was called Διονυσια κατ' αγρους, because it was celebrated in the country among the fields, in the autumn, when grapes and other fruit were ripe.

Dioptricks. [from Διοπτικη, Gr.] *In painting and architecture.* Affording a medium for the sight. A part of opticks, which treats of the different refractions of the light; assisting the sight in the view of distant objects. A department of science of the greatest use and importance to artists, particularly to painters and architects. Dioptricks is said by Millin to be a science of which the ancients were ignorant, and yet it is alluded to both by Pliny and Vitruvius. For the want of optical instruments Nero, who, it seems, was short-sighted, employed an emerald, reduced to a polished surface, for a mirror, wherein he viewed by reflection the combats of the gladiators.

Diota. [Lat. Διωτη, Gr.] *In ancient sculpture.* A sort of vase with two handles, which was used by the ancients in their feasts to contain wine. Diotæ are often represented on ancient medals, and principally on those of the island of Chios, to intimate the excellence of the wine which it produced. The richness of its soil and abundance of its natural produce were such that they gave rise to a proverb denoting an unequal comparison, *Chios ad Cœum*, used in the manner of our "Lombard Street to a China orange." The form of the diota, coming to a point at the lower end, has led some critics to suppose, when they have been found upon the Chian medals, that they represented a bobbin or cocoon of silk, which was a commodity much produced in that island. The word *diota* is also used by some ancient writers to indicate a measure of capacity. Upon some silver medals struck at Athens are often seen the figure of a diota, surmounted by an owl, the emblem of their tutelary goddess Minerva; probably to intimate the necessity of wisdom in the use of wine.

Diplois. [Lat. Διπλοις, Gr.] *In ancient costume.* A sort of double mantle used by old men and cynics. The latter class of philosophers adopted this dress as they wore not the tunic. Some writers have supposed that the diplois was a mantle of a large size, like those now worn in Italy, that would go twice or double over the body.

Dipteral. [*dipteros*, Lat. Διπτερος, Gr.] *In ancient architecture.* One of the seven orders of sacred buildings or temples, which is placed by Vitruvius after the pseudo or false dipteral. It is octostyle or eight columned, both in front and rear; but it has a double row of columns round the cell, as in the temple of Jupiter Quirinus, of the Doric order, and the Ionic temple of Diana at Ephesus, built by Ctesiphon.

Diptychus. [Lat. Διπτυχος, Gr.] *In the history of the arts.* A sort of ancient book or tablet that folded with two leaves. The ancients had two sorts of books, *volumenes*, which were made of flexible materials, as papyrus, parchment, &c. and were rolled, and *codices* or tablets of the sort called *diptychi*, when made of harder or more inflexible materials, as ivory, polished metals, and wood. These kind of books are of very ancient date, for they are mentioned by Homer (Il. vi. v. 168), in the account given by Glaucus to Diomede of his ancestor the illustrious Bellerophon, who was sent to Lycia by Prætus "with injurious letters, writing upon a *folded tablet* many deadly sentences." When the critics found fault with John Kemble for performing Cato with a bound book, he might have defended himself as using a *diptychus*, but he yielded and used a roll or volumen. *Diptychus* is also used by some ancient authors synonymously with *diploma*.

In this last form of books or *dyptichi* are those called, by archaiologists, consular tablets *(diptychi consulares)*. The convenience of rolls for large works or writings was beyond that of the diptychus or folding tablet, for they could be extended to any requisite length by adding new materials to the former when written full. But it was not so with their solid tablets, for once filled, it was difficult to extend them except in number, and then they were more difficult to use, and more easily lost or dispersed. These tablets were also called *pugillares*, as being of a size to hold in one hand.

In the end the diptychus or folding tablet was used for confidential or secret purposes. Sealed up, in envelopes of linen with wax and the signet of the writer, the contents, whether communicating secrets of politics, of love, or of interest, were safe till they reached their destination as the modern letter. The leaves were covered with wax, and the matter inscribed thereon with a style, as is often alluded to in the ancient poets. They were numbered as they followed seriatim, and the diptychus, when the interior of its two leaves were too limited for the writing, had others enclosed within them, and were called triptychon, pentaptychon, polyptychon, according to the number, three, five, or many tablets which the sealed diptychus contained.

When the real consular dignity was superseded in Rome by the imperial purple, and the consuls became officers of more honour and show than of popular responsibility, they assumed greater splendour than was usual in the more severe times of the republic. The new consul installed during the kalends of January made his acknowledgments to those friends who elected him, either in his public orations or by tablets which he distributed among the people, or transmitted to his absent friends. This last method gave rise to the richly embellished tablets called consular. At this period the diptychus was but in the infancy of its invention; but as the consular dignity increased in splendour under the protection of the emperor, as its powers were annihilated, so did the consul endeavour to keep up a show of his expiring glory by the munificence of his largesses, and the pomp of his public games. Thus the diptychus, under the direction of the consul, changed both its nature and its original destination. Ivory was the material principally used in its composition, which was reserved by law to the consular diptychs alone. The best artists were employed in carving their exteriors, where was to be seen the portrait of the consul with all the ornaments of his dignity. They added his names, his qualities, the denominations of his ancestors; and to publish his munificence to the world, they also represented his public shows in the circus and amphitheatre.

These consular diptychs were sent all over Italy, and even into parts of Gaul, sealed as before mentioned. Suetonius relates (in Aug. c. 10), that Augustus sealed his diptychs or diplomas, which are synonymous, with the figure of a sphynx, to denote secrecy, afterwards with a head of Alexander the Great, and finally with his own. In diplomatibus, libellisque, et epistolis signandis, initio sphinge usus est: mox imagine Alexandri Magni. Novissimè sua. In the time of Constantine they received the name of *evectiones*.

The formula of one of these ancient diplomas or diptychs has reached our times, and is preserved by Marculphus (i. 11), is worth recording. It is as follows.

ILLE PRINCEPS OMNIBVS AGENTIBVS IN LOCO. NOS GAIVM I. V. PARTIBVS ILLIS LEGATIONIS CAVSA DIREXIMVS, IDEO JVBEMVS, VT LOCIS CONVENIENTIBVS EIDEM A VOBIS EVECTIO SIMVL ET HVMANITAS MINISTRETVR, HOC EST, VEREDI SIVE PARAVEREDI TOT, PANES TOT, VINI MOD. TOT, CEREVISIÆ, MOD. TOT, LARDI LIB. TOT, CARNIS TOT, PORCI TOT, PORCELLI TOT, VERVECES TOT, AGNI TOT, ANSERES TOT, PHASIANI TOT, PVLLI TOT, OVA TOT, OLEI LIBRÆ TOT, GARI LIBRÆ TOT, MELLIS TOT, ACETI TOT, CVMINI TOT, PIPERIS TOT, COSTI TOT, CARIOPHYLLI TOT, SPICI TOT, CINAMOMI TOT, GRANI MASTICIS TOT, DACTILÆ TOT, PISTACIÆ TOT, AMIGDALÆ TOT, CERÆ LIB. TOT, SALIS TOT, OLERVM, LEGVMIMVM CARRA TOT, FAÇVLÆ TOT, PABVLI EQVORVM CARRA TOT. HÆC OMNIO TAM EVNDO, QVAM REDEVNDO EIDEM MINISTRARI IN LOCIS SOLITIS, ET IMPERI SINE MORA PROCURATE.

This curious ancient document may be thus rendered, "THE EMPEROR to all his officers whom it may concern. Know that we have sent the illustrious man, Gaius, as our ambassador into these parts. For this reason we therefore command you, by these writings, to provide and furnish to him all manner of friendly assistance at proper and convenient places; such, as so many riding and draught horses as he may want, as many loaves of bread, as many modii of wine, as many modii of beer, as many pounds of lard, as much butcher's meat, as many hogs, as many sucking pigs, as many wethers, as many lambs, as many geese, as many pheasants, as many pullets, as many eggs, as many pounds of oil, as many pounds of fish sauce, as much honey, as much vinegar, as much cumin, as much pepper, as many savoury herbs, as many cloves, as much spice, as much cinnamon, as many grains of mastic, as many dates, as many pistachio nuts, as many almonds, as many pounds of wax, as much salt, as much oil, as many cartloads of vegetables or pulse, as many torches, and as many cars of provender for the horses. All these things are to be fully and entirely provided in the requisite places, and without any delay."

By this imperial rescript or diptych we may learn how a Roman ambassador was

provided on his route to his destination. The consular diptychs were, as before stated, enclosed in covers of ivory beautifully carved in relief, with portraits of the consuls dressed in the insignia of their office, and often accompanied with representations of the consular games, and sometimes with inscriptions denoting the person celebrated.

These relics of ancient art are valuable documents, and of considerable use in developing the history of the periods to which they belong. Some that have reached our times appear to have been of the period of the lower empire, as indicated by the consulates. They afford an interesting key to the costume, manners, and usages of those times. They are both rare and curious. The most celebrated are the diptychs of Bourges and Leige, that have been described and commented upon by Father Wiltheim, a learned Jesuit; those of Compiegne, explained by Sidonius; those of Brescia and of Zurich, published by Hagenbuck; that of Dijon, discovered in 1718 by M. de la Marre, upon which Bouhiers, Mautours, and Montfaucon, in his Antiquité Expliquée, have given several very interesting dissertations. In 1773 D. Berthod read, in the academy of Besançon, a description of a leaf of a diptych preserved in the public library of the Benedictines, founded by the Abbé Boisot. This valuable relic of Roman art was lost during the revolution. It was, however, described by M. Coste, a bookseller of Besançon, in the Magazin Encyclopædique. The Royal Library of Paris has several diptychs in its cabinet of antiquities; some of which are of great beauty and curiosity. Among the best dissertations in addition to these before mentioned, are the *Thesaurus Diptychorum*, by Passeri.

Diribitorium. [Lat.] *In ancient architecture.* A large covered building in ancient Rome where the soldiers received their pay. It was begun and left unfinished by Marcus Agrippa, and stood near the Flaminian Circus, on a site now occupied by the Roman college. It was also used for the elections and popular assemblies, when the people gave their tablets inscribed with their sentiments from certain officers called *diribitores*. When the heat of the sun was too great, or the rain too powerful for performances in the theatre, they were represented in the diribitorium, which was one of the largest uncovered profane buildings in the city.

Discerniculum. [Lat.] *In ancient costume.* The pin or bodkin used by the Roman ladies to divide and fasten their hair in tresses.

Discinctus. [Lat.] *In ancient costume.* A statue or figure in a robe or garment without a girdle. It was regarded as a sign of effeminacy and softness; and sometimes as a mark of disgrace or dimissal from an active employment.

Discobolus. [Lat. Δισκοβολός, Gr. i.e. qui discum jacit.] *In antique sculpture.* A statue of one hurling the disk or quoit. Among the ancient games of the Greeks, that of the discus was a great favourite. The discus was a sort of round quoit, three or four inches thick, heavy, of stone, brass, copper, or iron, called δισκός and σολός. It was launched into the air from a thong that was put through a hole made in its centre. He who launched it held one of his hands near his breast, the other balancing the disk a while, which was thrown with a rotatory motion, and he who threw his disk farthest was the conqueror. The Lacedæmonians are said to have been the inventors of this healthful exercise; yet it is recorded as among the games of the mythological period. According to Ovid (Met. 10), Apollo laid down his divinity, and abandoned the charge of his oracle at Delphos to go to Sparta to play at the discus, where he mortally wounded his favourite Hyacinthus. Pausanias gives the invention of the game to Perseus, the son of Jupiter and Danaë, who had the misfortune to kill his maternal grandfather, Acrisius, with his disk.

The game of disks was in practice at the time of the Trojan war. The myrmidons of Achilles practised it during their leaders' inaction on the seashore, while burning with ire against Agamemnon. Homer also records it as among the gymnastic sports given at the funereal obsequies of Patroclus, with an iron discus, which the vast strength of Eëtion was wont to throw. But when the swift-footed noble Achilles slew him, he brought this also with other possessions into his ships. The first who seized this weighty disk was the noble Epeus, who sprang forward with Polypœtes, the godlike Leontius, and the Telamonian Ajax. Epeus seized the mass, and, whirling it round, hurled it; but all the Greeks laughed at him. Then Leonteus, offspring of Mars, threw second; third again threw the mighty Telamonian Ajax from his strong hand, and cast beyond all marks. But when now Polypœtes, obstinate in fight, had seized the mass, as far as some cow herdman hurls his crook, which, whirled around, flies

through the droves of oxen; so far, by the whole place of contest he cast beyond; and they shouted aloud; and the companions of the gallant Polypœtes, standing up, carried the prize of the king to the hollow ships.

Another celebrated game of the discus, which would give the painter a good opportunity of displaying the finest heroic forms, splendid costume, and classic armour, is that which Alcinoüs, king of the Phæacians, gave in honour of Ulysses, who took a part himself, and showed to his antagonist the superiority of the Greeks in this heroic exercise. When Pindar, in his first Istmian ode, celebrates the victories obtained in the public games by Castor and Iolaüs, their skill in launching the discus is particularly extolled. Lynceus was, according to the same poet, the first who obtained a prize for hurling the discus at the Olympic games. The Greeks prescribed certain rules for the game, and to acquire skill in the performance; which their physicians esteemed as conducive to health and strength.

Many artists have represented discoboli, and among others, according to Pliny, the painter Tauriscus, and the sculptors Naucydes and Myron. The celebrated discobolus that was dug up in the Villa Palombara on the Esquiline hill at Rome, which is well known in England by casts and various engravings, as well as by an antique copy in the Towneley gallery at the British Museum, is a duplicate of that which was executed in bronze by Myron, and described by Lucian. Quintilian has also eulogized the discobolus of Myron in a well known passage. There is also an antique copy of it, that was found in the Villa Hadriani, in the Museum at the Vatican, to which it was presented by Pius VI. Discoboli are often found sculptured on antique gems, and in different attitudes from that by Myron. Some are represented as holding the disk with both hands above their heads, as in one belonging to M. Akerblad, and in another belonging to M. de la Tarbie, described by Millin. See Bronze.

Disk. [*discus*, Lat. Δισκος, Gr.] *In antique sculpture.* A broad circular piece of iron or other metal, or of stone, used in the ancient sports. There is an ancient disk of granite in the cabinet of antiques of the Royal Library at Paris, described by Millin, in which are holes, one for the thumb and four for the fingers.

Disomum or Bisomum. *In ancient sculpture.* A vase or tomb made to receive the remains of two persons. The word has been found in ancient inscriptions.

Displuviatum. [Lat.] *In ancient architecture.* That which carries off rain two ways. According to Vitruvius a *cavædium displuviatum* was an open court exposed to the rain.

Disposition. [*dispositio*, Lat.] *In all the arts.* Tendency to any act or state. Also arrangement of the parts of a composition. Disposition signifies a certain innate aptitude or natural fitness in persons necessary for success in any of the arts. Disposition also means the manner in which an artist arranges the materials of his composition. Composition may be considered as the general order or arrangement of a design, *disposition* as the particular order. See Composition.

Disposition in architecture, according to Vitruvius (lib. i. cap. 11), is one of the six essentials that belong to that art. Disposition in architecture is divided into three parts, ichnography, orthography, and scenography (see those words), that is, plan, elevation, and perspective view. *Disposition* differs from *distribution*, inasmuch as it embraces every part belonging to the design of a building, while distribution implies the special arrangement of the interior. See Distribution.

Disproportion. [from *dis*, a preposition disjunctive, and *proportio*, Lat.] *In all the arts.* Unsuitableness in quantity of one thing to another; want of symmetry. See Proportion.

Distance, point of. See Perspective.

Distribution. [*distributio*, Lat.] *In architecture and painting.* The act of arranging the several parts of a picture or architectural design. The due arrangement of the subordinate parts or details in architecture is *distribution*; of the general idea or arrangement of the whole is *disposition*. See Disposition. To distribution belongs the arrangement of ornaments, as triglyphs, modillions, metopes, panels, bassi rilievi, pictures, furniture, &c. See Apartment, Cabinet, Chamber, House.

Ditriglyph. [from *di* two, and *triglyph*.] *In architecture.* A space comprehended between two triglyphs.

Diversity. [*diversitas*, Lat.] *In all the arts.* Difference, dissimilitude. Diversity is a quality in art that demands the greatest attention. It is the opposite of monotony, but if carried too far will occasion the work to become scattered or dispersed and confused, instead of agreeable and diversified. See Confused. *The Mass of Julius, the Attila*, and *the school of Athens*,

by RAFFAELLE, are fine examples of pictorial diversity; the *Laocoön* of sculptural; and the *Colosseum* and JONES's *Whitehall* of architectural; in none of which does diversity occasion confusion.

DIVIDICULA. [Lat.] *In ancient architecture.* A basin or head of a conduit in the Roman aquæducts, which collected the water from its source and divided it into the various districts. They were in general handsome and decorative buildings, under the direction of the *curator aquarium*, and by some writers are called *castella*. See AQUÆDUCT, CURATOR.

DOG. [*dogghe*, Dutch.] *In the history of the arts.* A domestic animal remarkably various in its species. In the heroic ages when the chase was the occupation of monarchs and princesses, this faithful animal, so necessary in that pursuit, was a favourite and cherished animal. As such he often became the subject of the artist's work and the poet's song. In ancient Rome the most esteemed of all their statues was that of a dog, executed in bronze with such miraculous perfection as to call forth the approbation of Pliny, who reckoned it the finest piece of cast sculpture in Rome, while the Laocoön of the palace of Titus was its equal in carved work. He thus expresses himself (lib. xxxiv. cap. 7), "Canis eximium miraculum, et indiscreta veri similitudo, non eo solùm intelligitur, quod ibi dicata fuerat, verum et nova satisdatione: nam summa nulla par videbatur. Capite tutelarios cavere pro eo, instituti publici fuit." It was guarded with a sort of religious caution, for they reckoned no one rich enough to answer for its value. The custodes of the temple, who had it in charge, answered for its safety at the peril of their lives.

Homer speaks of the fidelity of the old dog Argus, who alone of all the family knew his master Ulysses at his return after twenty years absence, and died with excessive joy at his sight. This event is recorded by ancient artists on some bassi rilievi, which represent Ulysses imposing silence upon Eurymachus, and on medals of Ithaca and of the Memmian family. Statues and bassi rilievi of Diana, particularly the Diana trivia, Endymion, Meleagar, Adonis, Paris, Actæon, are mostly accompanied by dogs. On an antique basso rilievo in the Vatican Actæon is represented as being eaten by his dogs. In the stanza degl' animali at Rome are also antique sculptures of this animal; and Boissard has published two of exquisite workmanship that were found in the Capitol. He has also published the representation of a fine antique mastiff dog, restored by Cavaceppi, that is thought to be the work of Phidias. This fine relic of ancient art is in England, and known by the name of the dog of Alcibiades; it is estimated at a very high price. The British Museum has also in the Towneley gallery two antique greyhounds in marble, of great beauty and truth. The superb gallery at Florence has also two fine antique statues of dogs, and Prince Chigi possesses one that was discovered at Laurentum. The Egyptians united the head of a dog to the body of a man in their statues of Osiris, and to the bodies of apes in their Cynocephali.

DOME. [Fr. from *duomo*, Ital.] *In architecture.* A kind of vaulted roof or covering employed in architecture, in the shape of some portion of a sphere, ellipsoid, &c. and frequently constructed of masonry. Domes, or more properly cupolas, differ in some respects from common arches, which are cylindric concavities, resting on parallel walls, and having therefore a curvature only in one direction; whereas domes, as also groins, have a double curvature, and derive a degree of stability from the circumstance, which is peculiarly deserving the attention of the architect.

The Italians derive their word *duomo*, whence the French and English architects have borrowed their *dome*, from the Latin *domus*, a house; and by eminence call the principal church in a place *il duomo*, the dome or house, applying it generally whether there be a cupola or not, as *il duomo di Milano*, to the gothic cathedral of Milan; *il duomo di San Petronio* at Bologna, and so on, in the same manner. *Cupola* is a large cup, cupoletta a small cupola, therefore cupola is the more correct word, and carries its full meaning better than dome, and is so used and applied by the best architects and critics. See CUPOLA, GROIN.

DOMESTIC ARCHITECTURE. [from *domesticus*, Lat.] *In architecture.* The art of designing and executing buildings for domestic or private use; as cottages, farmhouses, villas, dwellings, mansions, &c. See ARCHITECTURE, COTTAGE, VILLA, &c.

DOOR. [ᵹop, Saxon.] *In architecture.* The gate of a house; that which opens to yield entrance. The doors of the ancients were commonly raised above the level of the ground, and were made of wood, brass, or iron; and, to their temples, of ivory and gold. The jambs of the Roman doors were called antepagmentæ, the folding doors valvæ, single doors ostii, fores,

januæ, portæ; small doors ostiolii; a back door posticum, pseudothyrum; the doors opened inwards, unless otherwise permitted by an especial law, as to Publius Valerius Poplicola, and his brother who had twice conquered the Sabines. The doors of the Greeks opened outwards to the street, and when any one went out, he knocked on the inside, to give warning to those without to take care; the doors did not move on hinges as with the moderns, but on pivots, in the upper and lower parts of the doors, which was narrower at top than at bottom.

The arrangement and placing doors are of great consequence in a design; and their proportions and decorations give character. The size of the door must be regulated by its use, and its ornaments suited to the character of the design to which it is applied. A good proportion is two squares, or twice its width in height. See GATE, PORTAL.

DORIAN. [from *doria.*] *In sculpture and architecture.* After the manner and style of the people of Doria.

DORIC. [from *doria.*] *In architecture.* One of the three original orders of Greek architecture; and of the five of the Roman system. The late Mr. Edmund Aikin says of this beautiful and truly original order, that, " In considering the buildings of antiquity, and particularly of Greece, the first circumstance that strikes us is their extreme simplicity and even uniformity. The temples of Greece were invariably quadrilateral buildings, differing only in size, and in the disposition of the porticoes; which either ornamented the front alone, or sorrounded every side with their beautiful and shady avenue.

" The system of Grecian architecture is founded on the simple principles of wooden construction; a quadrangular area is enclosed with trunks of trees, placed perpendicularly, with regular intervals; these support lintels, upon which rest the beams of the cieling, and an enclosed roof covers the whole. Such was the model when touched by the hand of taste, the post and lintel were transmuted into the column and entablature, and the wooden hut into the temple.

" It appears probable that the earliest Greek temples were really of wood, since so many of them were consumed during the invasion of Xerxes; and that large and magnificent edifices were sometimes composed principally of this material, is rendered evident by the example of the temple of Jerusalem, which was surrounded by columns of cedar. But builders soon adopted the more noble and durable material of stone; and though the general system of architecture was already established, its forms received some modifications, by being thus, as it were, translated into a new language.

" A wooden lintel, from its fibrous texture, possessing considerable tenacity and strength in proportion to its weight, it was practicable to form very wide intercolumniations; thus, we are told by Vitruvius, that the ancient Tuscan temples were constructed with wooden architraves. Stone, on the other hand, of a granular composition, and of great specific gravity, would break by its own weight, in a bearing where a timber beam would be perfectly secure. When, therefore, porticoes were erected of stone, it was necessary, in order to secure solidity, to contract the distance between the columns to very narrow limits. A wooden edifice, never secure from the injuries of accident or violence, presented no motive for any great solidity in its construction. But in stone it is possible, as the energetic industry of the ancient Egyptians has demonstrated, to defy the injuries of time, and almost the violence of rapine. The architect who builds in stone may build for eternity, and this idea will give a motive for that grand and massy solidity so essential to the sublime of architecture. These circumstances led to the perfection of the Grecian style; the original model secured simplicity of form and construction, while a superior material preserved it from the meagreness attendant on wooden building.

" Thus arose the DORIC, or as it might be emphatically called, *the Grecian order*, the first born of architecture, a composition which bears the authentic and characteristic marks of its legitimate origin in wooden construction, transferred to stone.

" In contemplating a capital example of this order, as for instance, the Parthenon at Athens, how is our admiration excited at this noblest, as well as earliest, invention of the building art! What robust solidity in the column! what massy grandeur in the entablature! what harmony in its simplicity, not destitute of ornament, but possessing that ornament alone with which taste dignifies and refines the conception of vigorous genius; no foliage adds a vain and meretricious decoration, but the frieze bears the achievement of heroes; while every part, consistent in itself, and bearing a just relation to every other member, contributes to that harmonious effect which maintains the power of

first impressions, and excites increasing admiration in the intelligent observer. So in the immortal statue of Glycon, the form of heroic vigour is crowned with beauty, dignity, and grace. Other orders have elegance, have magnificence, but sublimity is the characteristic of the Doric alone." See Architecture, Capital, Column, Order.

Dormitory. [*dormitorium*, Lat.] *In architecture.* A large apartment to sleep in, distinguished from a bedchamber as containing many beds; such as belong to large boarding schools, barracks, hospitals, convents, monasteries, &c. The dormitory at Westminster School, by Inigo Jones, is a good example of such an apartment, which should be lofty, wide, airy, and of an eastern or south-eastern aspect, that it may receive the morning sun, and have air by its windows as long in the forenoon as possible, without being too much exposed to the western rains.

Doryphorus. [Lat. Δορυφόρος, Gr.] *In ancient sculpture.* Statues bearing spears or lances, representing the body guards that attended on ancient kings and princes.

Dovehouse. *In architecture.* A small building in which doves or pigeons are kept and bred. Dovehouses, or dovecots, as they are sometimes called, may be made subservient to decoration by taste, as they are useful in a country residence. See Aviary.

Dragon. [*draco*, Lat.] *In the mythology of the arts.* A fabulous animal or reptile, supposed to be a species of winged serpent, that was held in divine estimation by some of the earliest nations of antiquity, and used by the Romans, according to Ammianus Marcellinus (16), for the ensign of a company, as the eagle was of a regiment. The belief in this fabulous reptile was very general among the ancients, and their representations or descriptions are abundantly alarming. Pliny and Philostorgius relate that the dragons of Ethiopia were twenty ells in length. Ælian says they were thirty paces in length, and mentions a dragon that had been seen in the Indies, seventy ells in length, and with eyes as large as a Macedonian buckler. It was in the time of Alexander the Great, and received divine honours; residing in a cavern from which it only put forth its head. He also speaks of two other immense dragons, one of which measured forty-six ells in length, and the other eighty-eight; and of two smaller ones, thirteen and fourteen ells long respectively, which he says were brought alive to Alexandria, in the reign of Ptolemy Philadelphus. Under Ptolemy Evergetes, they had three smaller ones of nine and seven ells in length, the smaller of which, says Ælian, was kept with great care in the temple of Esculapius. Diodorus Siculus speaks of a dragon of thirty ells in length, that was taken during the reign of the same king, and Pliny, Philostratus, and other ancient authors, record similar instances. Ælian gives a crest and beard to the male dragon; and others describe it as having a large mouth and throat, teeth like a wild boar, and a long body covered with scales. Pliny relates that the dragons of Æthiopia traversed the seas in shoals of four and five each, holding their heads above the surface of the waves.

These dreadful animals, as they were believed to be, were objects of worship from fear with many people. In Epirus they kept sacred dragons, who were attended by a virgin, and they judged from his complacency or antipathy, by his taking his food freely or rejecting it, whether they should have a fruitful or a sterile season. Ælian relates abundant anecdotes of the credulity of the people of those ages concerning dragons, flying serpents, and such like fabulous monsters.

Representations of dragons are often found on ancient monuments. They are among the attributes of Esculapius and of Hygeia; are attached to the cars of Ceres and of Media; were the guardians of the Hesperian apples. In the fabulous histories of the chivalresque ages, the dragon is also mentioned, particularly one that was said to have been combatted by the patron saint of England, Saint George. They are also part of the heraldic emblazonments of the city of London, and a majestic one of bronze gilt surmounts the beautiful spire of Bow Church in Cheapside. The dragon of China, which also enters into the mythology of that strange people, differs from that of antiquity by having legs with feet armed with claws like those of birds.

The Romans, in the time of Vegetius, who wrote on their military affairs, carried the dragon as an ensign to every cohort, by an officer called *draconarius*. On Trajan's column it appears as a Dacian ensign, which is confirmed by various passages in Lucian. The dragon or serpent represented on a shield, which was found on a column upon the tomb of Epaminondas, indicated that he was descended from the Spartans, that is from those who sprang up from the dragons' teeth that were sown by Cadmus. But, the dragon

upon the shield of Menelaus, in a picture by Polygnotus at Delphos, designated the serpent, which during the sacrifice at Aulis, came out from under the altar. See ATTRIBUTES.

DRAPERY. [*draperie*, Fr.] *In painting and sculpture.* The dress of a figure in a picture or a statue. Drapery means the various sorts of habits or dresses, worn by the different nations and classes of people of every age and place. In hot climates the drapery is not so full and ample as in those of milder or of colder natures; and the inhabitants are more or less clothed as necessity commands. A knowledge of drapery and of all its characters is absolutely essential to an artist, and comes with more propriety, perhaps, under the word costume. See COSTUME.

The Greeks often represented their deities and heroes naked, the Romans rarely so. Naked, or nearly naked figures, are often found in the early sculptures of the Egyptians. Yet with all this partiality for representing the naked figure, in which the Greeks so much indulged and succeeded, they have equally surpassed all other people in the representation of drapery and costume. The most ample draperies that they gave to their male figures were those of Jupiter, who was sometimes represented, as in the celebrated statue at Olympia by Phidias, naked to his waist, but clothed from the girdle downward, signifying that his upper part being uncovered, he was known to the heavenly beings; but the lower part being covered, indicated how he concealed himself in his works from the view of man:—of Serapis, of Esculapius, of Silenus, and to the statues of philosophers. In the drapery of females they particularly excelled, giving them flowing full robes, arranged in graceful folds, and embellished with tasteful borders.

The Romans, though inferior to the Greeks in taste and style of draperies, have nevertheless carried the art of drapery, or of clothing their figures, to great perfection; and rarely, if ever, represented the naked figure. "Græca res est," says Pliny (lib. xxxiv. cap. 5.), "nihil velare. At contra Romana ac militaris, Thoracas addere." Among their finest draped figures are the Jupiter of the Palazzo Verospi, the Posidippus and the Menander formerly in the Musée des Arts at Paris. The Farnesian Flora and the Ariadne so often mentioned in this Dictionary. See ARIADNE. The ancient Greek paintings on their fictile vases, as witnessed in the splendid collections of Mr. T. Hope and the British Museum, also afford fine examples of drapery.

So completely was the naked statue reckoned of Greek workmanship, that the Romans called all unclothed statues by the general name of *statuæ Achillæ*, on account of the number of statues of Achilles which they had of that Grecian hero, armed only with his pelias or Greek javelin. It is of the Greeks and their knowledge of nature and art that Virgil speaks in his verses,

> "Excudent alii spirantia melius æra,
> Credo equidem, vivos ducent de marmore vultus."
> ÆN. vi.

The Romans named the draped statues of their military leaders after the names of their costume, as *Paludatas* when attired in the paludamentum of the general; *Thoracatas* when defended with the thoraca or breastplate (see CUIRASS); and *Loricatas* when completely armed with the lorica or coat of mail, or in complete armour. These were the leading classes of the military statues of the Romans, as deduced from the authority of Pliny and other efficient writers, and under which archaiologists of the present day should arrange them according to the order of their vestments or drapery.

The Roman statues belonging to civil life were named also from the order of vestments with which they were draperied, as *Togatas*, *Tunicatas*, or *Pænulatas*, according as they are clothed in the toga, tunica, or pænula. They had other statues of a superior class, representing their emperors, or of the imperial families, which clad in the paludamentum or chlamys (see CHLAMYS), a long robe over their complete imperial armour, were, according to Isidorus, as quoted by Pliny, only appropriated to the imperator. Such is the statue of Augustus in the capitol, which was published by Laurentius Vaccarius in 1584. The *statuæ Loricatæ* were Pedestrian, and of the class that Julius Cæsar consented to be represented in bronze, according to Pliny (lib. xxxiv. cap. 5.), "Cæsar quidem Dictator loricatam sibi dicari in Foro suo passus est."

The other classes of statues among the Romans were *Pedestres*, *Equestres*, and *Curules*, which will all be treated of in their proper places. See COSTUME, SCULPTURE, &c.

Draperies in painting are of equal importance as in sculpture, and, in addition to their arrangement, distribution, and character, require additional study arising from the different nature of the two arts. The painter has to add to the foregoing,

colour and material, which he must assort according to the age, character, sex, rank, and even complexion of the figure which he has to clothe; and if in historical painting, to suit the style of the colouring, character, and arrangement of his picture. There are even certain artists who have studied drapery alone with such effect, as to have neglected the more important parts of the art, as drawing, character, expression, and composition, and have fallen under Reynolds's just censure of being mere drapery painters; making the word drapery almost synonymous with trifling. That great English master says, in his fourth discourse, "there must be light and shadow; the figures must be *clothed*, there must be a background; but none of these ought to appear to have taken up any part of the artist's attention." To know these is only the learning which is required of the artist, to show them ostentatiously is pedantry. "An inferior artist," says Sir Joshua, "is unwilling that any part of his industry should be lost upon the spectator." Again he says, "In the same manner as the historical painter never enters into the detail of colours, so neither does he debase his conceptions with minute attention to the discriminations of drapery. It is the inferior style that marks the variety of stuffs. With him the clothing is neither woollen, nor linen, nor silk, satin, or velvet; it is drapery; it is nothing more. The art of disposing the foldings of drapery makes a very considerable part of the painter's study; to make it merely natural is a mechanical operation, to which neither genius nor taste are required; whereas it requires the nicest judgment to dispose the drapery so that the folds shall have an easy communication, and gracefully follow each other with such natural negligence, as to look like the effect of chance, and at the same time show the figure under it to the utmost advantage."

Carlo Maratti was of opinion, that the disposition of drapery was a more difficult art than even that of drawing the human figure; that a student might be more easily taught the latter than the former; as the rules of drapery, he said, could not be so well ascertained as those for delineating a correct form.

The mechanical means of studying drapery are by observing the most elegant and tastefully dressing persons, and by clothing a mannekin or lay figure in the drapery required. See COSTUME, LAY FIGURE, DECORATION.

DRAUGHTSMAN. *In all the arts.* One who forms representations of objects by drawing or draughts. Distinguished from an artist as being rather a copier, than possessing original talents. Thus the draughtsmen to engravers. Architectural draughtsmen, who draw the designs of others, but do not possess the inventive talent of the architect, the deep knowledge of the science of architecture, nor the businesslike part of conducting the operations of building. See ARCHITECT, BUILDER.

DRAWING. [from *draw* to delineate or represent by picture, from the Saxon ᵭꞃaȝan.] *In all the arts.* The art of representation by picture; principally by chalk and pencil. The art of drawing or delineating the boundaries, outlines, terminations, and forms of figures, is of the greatest importance to every artist. It is the groundwork of painting and sculpture, and is almost architecture itself. Drawing, so called by way of excellence in painting, embraces all the first qualities of the art, demands a good eye, a fine taste, and a well practised hand. It requires a knowledge of pictorial geometry, perspective, anatomy, proportion, both exact and relative, and practice. This power, which must be acquired during the artist's period of discipline or studency in the studio of his preceptor, and in the schools, will give him those rules and strength in his art that Sir Joshua Reynolds (Disc. 1.) calls an "armour, which upon the strong is an ornament and a defence, and upon the weak and misshapen a load." It will give him (ibid.) "a facility in composing, a lively, and what is called a masterly handling of the chalk or pencil," that are much to be desired if not acquired at too great an expense of other essential qualities and other studies.

The great masters were incessant in their study of drawing, and did not throw away the portcrayon on taking up the brush. "When they conceived a subject," says one (Reynolds), who had studied their works deeply, although he did not draw scholastically himself, "they first made a variety of sketches; then a finished drawing of the whole; after that, a more correct drawing of every separate part, heads, hands, feet, and pieces of drapery; they then painted the picture, and, after all, retouched it from the life. The pictures thus wrought with such pains, now appear like the effect of enchantment, and as if some mighty genius had struck them off at a blow." These are fine and practicable doctrines, and should be followed and obeyed when the lessons of the schools relax, for practice upon the easel.

DRAWING.

Drawing is one of the principal instruments of painting, and must be studied previously to and in conjunction, with composition, chiaroscuro, colouring, and execution. (See these words.) It is no less so in architecture, and must be studied geometrically and perspectively, and brought to the aid of composition, arrangement, distribution, order, design. In sculpture its great necessity is superseded by that of modelling, except in sketching designs. Concerning the comparative merits of the French and English school of art in the article of drawing, Mr. SHEE has some pertinent remarks in a note to his poem called *Elements of Art.* "The French painter," says Mr. Shee, "remains longer in the academy, and consequently becomes more skilled in those parts of his art which are to be acquired there. He has more respect for the merits of design" (that is drawing), "and therefore studies them with more attention. He finds but little opportunity or temptation to turn his talents to portrait painting, and from his habits and situation has less occasion to resort to it as a means of subsistence. All his prospects, therefore, are essentially dependent on his elementary knowledge, and demand a continued course of academical application. His pencil is commonly employed in works of imagination; on subjects of poetry and history; in which deformity cannot be sanctioned by fashion, nor incorrectness excused by caprice: in which the tailor cannot officiate in aid of the anatomist; nor imbecility take shelter from the critic, under cover of a coat and waistcoat. *He must, in short, draw the figure well, or he can do nothing.*

"In the French school, therefore, the portcrayon supersedes the pencil; they become designers rather than painters. In the English school the pencil triumphs, and the process is reversed. *They* are more theoretical—*we* are more practical; they show more science in the foundation—we more skill in the superstructure; the vigour of our execution suffers in the feebleness of our design" (drawing); "they have more art—we have more nature; they look to the Roman school—we follow the Venetian; and, it must be confessed, that their aim is the higher, though it may be admitted that ours is the most successful."

This censure against the carelessness of drawing by the English artists, which has been written above fifteen years, is less necessary now than it was at the time it was penned. The gallery of antiques at the British Museum, the greater skill required from the probationers and students of the Royal Academy, and the severe and learned style practised by Mr. Haydon and the pupils of his school has occasioned great improvement in our drawing; while the schools of colour, at the British Institution and at the Royal Academy, with the example left by Reynolds and his school, leaves little to fear of our practice being superseded by mere theory.

Drawing and colouring must be united to form a good painter, and all the other requisites of the art to make a great one. Between the opposite extremes of the French and English schools may be found a safe medium of study. Mr. Shee recommends, in his Elements of Art (canto 1, note to verse 211), a middle course "as most likely to embrace the benefits of each practice, without incurring the disadvantages of either. The student who long employs himself exclusively in drawing, while he attains to correctness and precision, runs the risk of becoming hard and dry; accustomed to express objects by lines, the practice adheres to him after he has taken up the palette. He clings to his outline with affectionate solicitude, and as it is the part which he executes with most facility and skill, he is rarely induced to sacrifice it to those minor merits, in his estimation, richness of colouring and rotundity of effect. On the other hand, the student who prosecutes his studies with the oil pencil only is exposed to run into opposite and less pardonable errors. If he is mellow in his colouring, rich in his surface, and forcible in his effects, he becomes feeble in his composition, incorrect in his forms, and slovenly in his execution. If he be not hard and dry, he is probably vague and undefined; he loses all power of precision and detail generalizes objects in shapeless masses, and is obliged to resort to a variety of awkward expedients to conceal the imbecility of his design in the artifice of his execution.

"A plan of study, in which the painter and draughtsman cooperate, in which the pencil and the portcrayon may act as mutual correctives, offers, perhaps, the best security for a style, which shall unite the beauties of colouring to the merits of design; and sustain the illusions of vigorous effect by scientific precision and judicious detail."

Of the leading elements of painting Raffaelle has excelled in drawing, Titian in colouring, Rembrandt in chiaroscuro, Michel Angiolo in composition, expression, grandeur, and Tintoretto for execu-

tion. Their works are therefore indispensable in a school or academy of art. See ACADEMY, SCHOOL.

The human figure, as it is the most difficult, so should it be the first object of the student in drawing. To accomplish this he must first begin with making himself used to the management of his portcrayon and chalk to produce the effect of light and shade that he sees before him. When these first rudiments of drawing are acquired, and the student can draw with sufficient correctness, he must then apply himself to the study of the figure after the antique and nature, in a philosophical manner.

The different styles of drawing or design may be arranged under the heads of *individual nature*, or those common and familiar forms, with all the imperfections and peculiarities of the individual model; which, however necessary in the study, must not be introduced in the picture, like the finely coloured picture of Adam and Eve by Guido, formerly in the Napoleon Museum, where the markings of the garters and other artificial ligaments which the model wore, were painted in the picture of the first pair of human beings, who were never clothed, were naked, and were not ashamed. Individual nature is the department of art which the Dutch masters, our great artists Hogarth and Wilkie, and some of our best portrait painters have adopted and excelled in. The humour, character, and expression of the two English masters abovenamed have raised them, however, above the dull copyings of some of the Dutch school. The next division of style in drawing is that of *select nature*, where the artist has made a selection from the mass of individuals by which he is surrounded for a specific purpose. In this class the artist selects his models according to the view or design which he contemplates, which not only makes his works more appropriate, but prevents monotony in his pictures. Raffaelle, it is well known, sketched all his figures in one work from the same individual model, but never in his finished pictures, which are as full of variety as the works of nature herself.

The third great division is the *grand style*, the *gran'-gusto* of the Italians, the *beau ideal* of the French, the ideal beauty of nature in which the Greeks are so much our masters. Not that *ideal* beauty that would improve upon nature, but that elevation of sentiment, that selection of natural beauties which, though they do not often fall to the lot of an individual, may be supposed to be sometimes collected, and have in themselves nothing out of nature, nor inconsistent with its functions. It does not differ from individual nature by opposition so much as by selection. The wonderful sculptures from the Parthenon in the British Museum, called the Elgin Marbles, possess this charm of pure and perfect elevated nature in the highest degree: and the Apollo Belvedere is one somewhat lower through an affectation of ideal beauty beyond and out of nature.

This last style, which I prefer calling the historical, heroical, or beautiful style to the doubtful phraseology of *ideal*, comprehends beauty of form, propriety of attitude, elegance of outline, choice and propriety of expression, play and arrangement of drapery, in short, every thing that can elevate individual and select nature to the most sublime conceptions of the imagination and intellectual dignity. "It is not easy," says Reynolds in his third discourse, "to define in what this great style consists; nor to describe, by words, the proper means of acquiring it, if the mind of the student should be at all capable of such an acquisition. Could we teach taste and genius by rules, they would be no longer taste and genius. But though there neither are nor can be any precise invariable rules for the exercise or the acquisition of these great qualities, yet we may truly say, that they always operate in proportion to our attention in observing the works of nature, to our skill in selecting, and to our care in digesting, methodizing, and comparing our observations. There are many beauties in our art that seem at first to be without the reach of precept, and yet may easily be reduced to practical principles. Experience is all in all; but it is not every one who profits by experience: and most people err, not so much from want of capacity to find their object as from not knowing what object to pursue. This great ideal perfection and beauty is not to be sought in the heavens, but upon the earth: they are about us, and upon every side of us. But the power of discovering what is deformed in nature, or, in other words, what is particular and uncommon can be acquired only by experience; and the whole beauty and grandeur of the art consists, in my opinion, in being able to get above all singular forms, local customs, particularities, and details of every kind.

"All the objects which are exhibited to our view by nature, upon close examination will be found to have their blemishes and defects. The most beautiful forms have something about them like weakness, minuteness, or imperfection. But it is not

every eye that perceives these blemishes: it must be an eye long used to the contemplation and comparison of these forms; and which, by a long habit of observing what any set of objects of the same kind have in common, has acquired the power of discerning what each wants in particular. *This long laborious comparison should be the first study of the painter who aims at the greatest style.* By this means he acquires a just idea of beautiful forms; he corrects nature by herself, her imperfect state by her more perfect. His eye being enabled to distinguish the accidental deficiencies, excrescences, and deformities of things, from their general figures, he makes out an abstract idea of their forms more perfect than any one original; and, what may seem a paradox, he learns to design naturally by drawing his figures unlike to any one object. This idea of the perfect state of nature, which the artist calls the ideal beauty, is the great leading principle by which works of genius are conducted. By this Phidias acquired his fame: he wrought upon a sober principle what has so much excited the enthusiasm of the world; and by this method you" (students of art), "who have courage to tread the same path, may acquire equal reputation."

The style of drawing or design, therefore, that the artist should study, ought to be founded on nature; *individual* nature in the commencement of his studies, *select* as he proceeds, and *idealized* according to the principles of Reynolds and the practice of Phidias, that is, of the beauty of the perfect state of nature when he attempts originality. The old antique, the admiration of the French and Italian schools, was too much idealized, that is, it was out of nature; Phidias and the Greeks are only just inferior to nature herself in the grand works of their period, which have reached our times. "He," says Proclus (lib. 2. in Timæum Platonis, as cited by JUNIUS *de Pictura Veterum*), "who takes for his model such forms as nature produces, and confines himself to an exact imitation of them, will never attain to what is perfectly beautiful: for the works of nature are full of disproportion, and fall very short of the true standard of beauty. So that Phidias, when he formed his Jupiter, did not copy any object ever presented to his sight; but contemplated only that image which he had conceived in his mind from Homer's description." And thus Cicero, speaking also of Phidias and of his practice: "Neither did this artist, when he carved the image of Jupiter or Minerva, set before him any one human figure as a pattern which he was to copy; but having a more perfect idea of beauty fixed in his mind, this is steadily contemplated; and to the imitation of this all his skill and labour were directed."

It is therefore clear that other qualities of the mind are required from the artist, than a mere ability of hand or correctness of eye in *copying*, *selecting*, or *composing* from nature. As much as the actor falls short in the personification of Shakspeare's ideally natural conceptions, so much must the artist conceive in restoring it, and in making the picture equal the poetry. Macbeth or Hamlet must not be a portrait of Garrick or Kemble, with all their natural imperfections, but Macbeth and Hamlet, as Shakspeare imagines them, and as Garrick would have looked and Kemble have spoken had the natural stature of the one or voice of the other equalled their conceptions. Here the painter of genius has room to equal the poet and to surpass the tragedian.

The *artist*, and here the word is used in its most comprehensive sense, has therefore to study beauty, grace, harmony, expression, elegance, and dignity. Pure simple beauty, or the perfection of nature, must be his first object; grace, elegance, and propriety of attitude his next; and harmony of parts, or a true proportion or relation to each other, and a characteristic expression both of features, as commonly so called, and of the limbs and body, commonly called action, his third.

Under the article drapery the naked statues of the Greeks and the clothed statues of the Romans were discussed; and it is worthy of observation, how much beauty and perfection arise from that entire unconsciousness of observation, that careless decency, and gracefulness of attitude which characterize all the statues of the Greeks. An attentive study of the beautiful models of nature that were always before their eyes in their gymnastic festivals, instead of a vain search after abstract rules and predetermined lines of *ideal* beauty, are among the principal causes why the ancient artists have produced works that have been the delight of every age and of every spectator.

The following statues and sculptures are among the masterpieces of ancient art to which the attention of the student is particularly directed, as subjects for his studies in chalk drawing or design.

First, of all the remains of ancient art, those incomparable works THE ELGIN MARBLES. Of these, the Theseus, the Ilyssus,

the wonderful fragment of the chest and shoulders of Neptune among the naked figures. The colossal statue of Bacchus, the Fates, the Victory, the Canephora, and the Panathenaic procession, for the clothed figures; and every one for various sorts of perfection in art, equally useful to the painter, the sculptor, the architect, and the engraver. Of these transcendent works Canova said, in his letter to Lord Elgin, "I admire in them the truth of nature combined with the choice of beautiful forms: every thing about them breathes animation, with a singular truth of expression, and with a degree of skill which is the more exquisite as it is without the least affectation of the pomp of art, which is concealed with admirable address. The naked figures are real flesh in its native beauty." They were for more than seven hundred years the admiration of the ancient world; and in the time of Plutarch, that is, in the age of Trajan, were regarded as inimitable for their grace and beauty; μικρὸν ἐάμμηκα καὶ χαριεν. Plut. Per. § 13.

The celebrated trunk of the Hercules, commonly called *the Torso of the Belvedere*, is another beautiful work that merits the greatest attention. It was also the admiration of Michel Angiolo, and possesses qualities in art of the highest sort. It is less cumbrous in form, and more purified from the grosser parts of human nature than any other statue of Hercules in existence.

The Farnese Hercules is also a fine antique; the muscular system of the heroic demigod is finely developed for studies in drawing, but in taste and style it is at an immeasurable distance from the Elgin marbles, and even the last mentioned Torso.

Next to the Torso of the Belvedere may be reckoned the *Belvedere Apollo* as the most sublime. His stature is heroic, and his attitude is appropriate and commanding. It is a fine study for general effect and characters, but the details of its proportions are inferior in truth and nature to those of the Theseus and Ilyssus of the Parthenon. See Apollo Belvedere.

The well known antique group of Laocoon, from the second Æneid, is another example worth notice for composition, arrangement, expression, terror, and pain. It is abundant in faults of proportion and taste, but its beauties far transcend them. Pliny reckoned it the first piece of art in Rome, and conceived that they had nothing in painting or in sculpture so perfect. "Opus omnibus," says he (lib. xxxvi.) "et picturæ, et statuariæ artis præferendum." As a relic of ancient art it cannot be too much admired, but as a didactic work it is inferior to the Torso and Apollo.

The *Venus de Medici* may be considered a perfect model of female beauty, grace, elegance, sweetness, and perfection of the female form. The sweetness and delicacy of her fine form render this statue a fit representative of the queen of beauty.

The *Antinous of the Belvedere* is also one of the finest remains of ancient art, and is justly celebrated for the beauty of its details, and the delicacy, harmony, and flow of its outline. "The head of this figure," says a writer in the Edinburgh Encyclopædia, "is, without controversy, the most beautiful of that class of character now extant. The face presents the graces of youthful beauty, accompanied with native innocence, without the indication of any passion capable of disturbing the harmony of parts, and the repose of mind impressed on every feature."

The *Gladiators*, both fighting and dying, are to be admired, for many beauties, but after the student has mastered his chalks and studied the Elgin and the Towneley marbles, the Apollo, the Venus, and some of the groupings of the Elgin and Phigaleian friezes and metopes; he may commence drawing from nature, undertaking a course of anatomy and anatomical drawing, and return to the antique with increased knowledge and for a renewed taste of select and beautiful nature, after his deep inspirations at the fountains of pure but individual nature.

The drawings of da Vinci, Michel Angiolo, Raffaelle, the Caracci, Titian, Coreggio, Parmegiano, Guido, Domenichino, Poussin, and Rubens, of which there are many in our accessible English libraries, are to be studied for style and manner; and next to them facsimile engravings from them, which are more common, and are valuable as they approach fidelity.

The following tables, extracted from the work called *I Principi del Disegno*, published at Rome by Volpato and Morghen, of the measurements of the three principal statues of antiquity thrown into a tabular form by the able author (P. G.) of the article Drawing, in Dr. Brewster's Edinburgh Encyclopædia, will be of use to the student in drawing in his earliest stages, and enable him to form a perfect idea of the proportions adopted by the ancients, and the general distinctions between the male and female characters.

PROPORTION OF THE	APOLLO.		VENUS.		HERCULES.	
	Feet.	Ins.	Feet.	Ins.	Feet.	Ins.
From the beginning of the head to the root of the hairs	3	0	3	0	3	0
From the root of the hairs to the eyebrows, or beginning of the nose	3	0	3	0	3	0
From the eyebrows to the end of the nose	3	0	3	0	3	0
From the end of the nose to the bottom of the chin	3	0	3	0	3	0
From the chin to the articulation of the clavicle, with the sternum	5	1	4	3½	6	0
From the clavicle to the end of the breast	9	3½	10	5	9	4
From the end of the breast to the middle of the umbilicus	10	5½	8	2	10	4
From the umbilicus to the symphysis pubis	7	4½	11	4½	8	2
From the symphysis pubis to the middle of the patella	24	0	18	2	23	3
From the middle of the patella to the beginning of the flank	28	2	27	3	30	1½
From the same to the swell of the foot	23	3½				
From the swell of the foot to the end of the figure, or to the ground	4	4				
From the patella to the ground	.....		25	3		
From the patella to the end of the heel of the right leg	.....		.....		29	2½
The length of the sole of the foot	14	1½				
The highest part of the foot from the ground	.....		3	5½	6	1½
From the instep to the end of the toes	.....		9	0½	10	1½
From the clavicle or collar bone to the beginning of the deltoid muscle	9	0	6	3		
The length of the whole clavicle on the right side	.....		.....		14	1
From the clavicle to the nipple	10	4½	6	0½	10	4
From one end of the breast to the other	15	0	11	2	15	1½
The greatest breadth of the trunk, taken a little below the beginning of the thorax	18	3	.....		22	4
The breadth of the trunk from the end of the breast	.....		15	4½		
The narrowest part of the same, taken at the beginning of the flank	15	3	15	1	19	3½
The greatest breadth of ossa ilei, where the flanks project most	16	4	17	5	21	1½
From the highest part of the deltoid muscle to the end of the biceps	17	0½				
From the beginning of the os humeri to the cubit	.....		20	2	22	1½
From the end of the biceps to the beginning of the hand	16	0	14	0	15	1½
The greatest breadth of the fore arm in front	4	5	5	0	8	2
The greatest breadth of the arm in front	5	3	4	5	6	1
Breadth of the pulse of the arm in front	.....		.....		5	1
The greatest breadth from one trochanter to the other	17	5	19	3	22	0
The greatest breadth of the thigh in front	9	2½	9	5		
The greatest breadth of the left thigh	.....		.....		11	0½
The greatest breadth of the knee, opposite the middle of the patella	5	3½	5	0	6	1
The greatest breadth of the calf of the leg	6	3½	6	3½	7	5½
The greatest breadth between the inner and the outer ankle	4	0½	4	0	4	3
The narrowest part of the foot	3	3	3	3	3	5
The broadest part of the same	5	0	5	1	6	4½
From the last vertebra of the neck to the lower part of the os sacrum	.....		.....		38	4
From the end of the os sacrum to the end of the glutæus	.....		.....		6	1
From the end of the glutæus to the beginning of the gastrocnemius muscle	.....		.....		13	4
From the beginning of the gastrocnemius to the end of the figure	.....		.....		30	1

The various styles of drawing are with *chalks, crayons, Indian ink, black lead, neutral tint, sepia,* and *coloured in water colours, body colours, distemper*, &c., and are classed into *architectural, landscape, portrait*, the *human figure, historical, animal*, &c. See Chalk, Crayons, Black Lead, Distemper, Architecture, Indian Ink, Painting, Sketch, &c.

Drawing instruments. See Instruments.

Drawing-room or Withdrawing-room. *In architecture.* An apartment or large room at court, or in a Royal palace, where the sovereign receives the male and female nobility and gentry; distinguished from the levee, which is for gentlemen only. Also a retiring or assembling room for company previous to dinner, and for the lady of the house to receive her company, to which they withdraw afterwards. A light, elegant, and gay style of architecture and decoration is the best suited for the drawing-room; which should be furnished with pictures, statues, bassi rilievi, and other elegant works of art of the choicest description. In moderate sized houses the drawing room is often made use of also for a music room.

Dresden. [*Dresda* and *Dresdena*, Lat.] *In the history of the arts.* The ancient *Misna*, chief town of the province of *Misnia.* The capital of the kingdom of Saxony; and celebrated for its collections of the finest works of art and its able artists. It is situated in a rich and fertile country, on the banks of the river Elbe, at its junction with the Weisseritz, and is divided into two parts, called the old and the new town, by the first of these rivers. The town properly consists of three parts, Old Dresden, with its three suburbs; the new town (Neustadt), which received this name from Augustus II; and the Frederickstadt or Ostra, which is connected with the suburbs of Old Dresden by a stone bridge over the Weisseritz. The bridge which unites the old and new town, and which has been either destroyed or greatly injured by the French in 1813, was reckoned one of the finest in Europe. It was built of stone, and consisted of nineteen extremely flat arches; its length was about seven hundred and seven ells, and on the fifth pier was placed an instrument for measuring the heights of the river. Augustus II. furnished the bridge with footpaths, and adorned it with an iron balustrade, surmounted by vases, trophies, and lamps. The streets of this city are sixty-one in number, and are straight, spacious, well paved, and well lighted; and the houses are in general high, well built, and commodious. The town contains several handsome squares, and many elegant public edifices.

The Royal palace, formerly the electoral palace, is a very fine building, and owes its chief ornaments to Augustus II. The floors are principally of exquisite marble, and the walls are covered with mirrors. The green room, or vault, which contains eight rooms, is particularly splendid; and the hall of the giants, the hall of audience, and the chambers of parade, are worthy of peculiar notice. The tower of the palace is three hundred and fifty-five feet and a half high, exclusive of the conductor. The green room contains a prodigious number of natural and artificial curiosities.

The celebrated gallery of pictures occupies the second floor of the palace. It consists of several rooms communicating with each other in a circular form, and contains twelve hundred paintings, by three hundred and thirty-four masters of the principal schools of painting. All of these are originals, and are admirably preserved. Besides many pieces of German, Flemish, and Dutch painters; the gallery contains the best works of Annibale Caracci, Raffaelle, Guido, Albano, Leonardo da Vinci, Vandyck, Titian, Andrea del Sarto, Rembrandt, Caravaggio, Tintoretto, Nicolas Poussin, Luca Giordano, Coreggio, Pompeo Battoni, and Rubens. The celebrated Night, or Il Notte, and the Magdalen of Correggio are greatly and deservedly admired. A list of the principal pictures will be found in Lemaistre's *Travels*, vol. ii. p. 399. In the year 1806 this gallery was enriched with a large historical painting by Fr. Mathæi, with twelve figures representing Egistheus punished by Orestes and Pylades, in the palace of Agamemnon.

The palace of Prince Antoine is situated in the Fauxbourg, and that of Maximilian, which is a small though a light and elegant building, is situated on the other side of the bridge.

The Japanese palace, or the Dutch palace, as it is often called, stands in a most picturesque situation, elevating its majestic cupolas among the lofty trees. It is a large square building, and was intended by Augustus III. for a Chinese palace. The garden is small, and at the end of it near the water is a terrace, which commands a delightful view of the city, the river, and the environs of the town. The ground floor of this palace contains the collection of antiquities, which fills a long suit of rooms. It was formed between 1720 and 1730 by Augustus III., who purchased the greater part of the gallery of Prince Chigi at Rome. He paid six thousand ducats for the vases of porcelain made at Rome, and painted by Raffaelle; and he also bought from the elector of Brandenburgh two porcelain vases from Japan. The collection of porcelain is

reckoned the finest in Europe, and consists of several millions of pieces of all kinds, from every country, and of every age. Mr. Lemaistre, who has given an account of several of the articles in this cabinet, considers it as the finest which he has seen, excepting the collection of antiquities at Paris. The three Grecian statues of females, which were found in the first excavations made at Herculaneum, in 1706, are particularly admired.

The two upper floors of this palace are appropriated to the public library, which contains above one hundred and fifty thousand volumes, and two thousand manuscripts. The books are kept in high order, and the library is open several days in the week to the public, who are even allowed to carry the books to their own houses.

The *tresor*, or collection of jewels, contains a vast assemblage of diamonds and other precious stones, and innumerable curiosities in ivory, enamel, coral, and jasper, with clocks and other mechanical instruments.

The gardens, called Der Zwinger, which form a kind of public promenade, contain several unfinished buildings, which were intended by Augustus II. to form part of a magnificent palace. The architecture is loaded with ornaments, and many of the buildings are in a state of ruin. These buildings contain a cabinet of prints and drawings, which is deemed one of the finest in Europe, and contains specimens of the art from its infancy to its present state; a cabinet of petrifactions and incrustations, and other objects of natural history; a cabinet of anatomical preparations; and a saloon of mathematical and physical instruments. The other public buildings are the large and the small opera house, the assembly rooms, the arsenal, which contains the first fire arms invented by Bertholde Schwarze, the military academy, the carousal, the barracks, the mint, the landhause or state house, the royal China warehouse, the hotels of Schoenberg, of Saul, of the Countess of Mokenska, of Flemming, of Anholt, of Vitzthum, of Bruhl, of Cosel, and of Marcolini; the last of which is remarkable for its furniture, its pictures, and its gardens, and for the colossal group of Neptune and his court. The hotel of Count Bruhl is now employed as a depot for the porcelain manufactures; but the garden is open to the public, and forms a delightful promenade on the banks of the Elbe. The carousal or the court where tournaments and combats with wild beasts were formerly exhibited, appears to have been once a fine edifice, but it is falling rapidly to decay.

Dresden contains about eighteen churches, the most remarkable of which are, the church of the Holy Cross, the church of the Catholics, the church of the Court, the church of Notre Dame. The church of the Holy Cross is an enormous circular mass of stone, and the painting at the great altar was executed by Schoenan. The church of the Catholics, built by Augustus III. between 1737 and 1756, is one of the finest in Germany, and the handsomest building in Dresden. It stands delightfully on elevated ground, nearly fronting the bridge over the Elbe. Its organ is the chef d'œuvre of the celebrated Silbermann. It is decorated by several admirable paintings by Mengs, a native of Dresden, among which is the Ascension, which is reckoned his masterpiece, and adorns the principal altar. The tower is three hundred and three feet high, and the total expense of building it and the church was nine hundred and six thousand nine hundred and fifty-five rix dollars. The church of Notre Dame, or St. Mary's (Francis Kirche), was built, in 1734, by Augustus II. on the plan of St. Peter's at Rome. It cost three hundred thousand rix dollars. From the lantern of the cupola the view is universally admired.

The literary and charitable establishments are numerous and well managed. The principal of these are the academy of painting and architecture, the annual exhibition of which is held on the 5th of May; the veterinary school, the academy of noble cadets, the military school, the school of artillery and engineering, the college of health, medicine, and surgery, the lying-in hospital, the school of freemasons, the Catholic school, the foundation of Josephine, the school of police, the school of St. Croix, the house of industry, which finds employment for more than three thousand individuals; the foundling hospital, the infirmary, the orphan's hospital, the Catholic hospital, and a great variety of similar institutions.

For further and more general particulars of Dresden, see Dr. Brewster's Encyclopædia, and the various books of travels, &c. referred to in that work. The most interesting of which to an artist are Moore's *View of Society and Manners in France, Switzerland, and Germany;* Lemaistre's *Travels through Part of France, Germany, &c.; Lettres sur Dresde*, Berlin, 1801, 8vo.; *Description de Dresde et de ses Environs, à l'Usage des Etrangers, traduite de l'Allemande*, 1807.

Dress. [*dresser*, Fr.] *In painting and sculpture.* To clothe or invest a figure with drapery. See Costume, Drapery.

Drip. [*drippen*, Dutch.] *In architecture.* A channel cut or stone laid to a certain angle, to throw off the drip water from copings, cornices, coronas, sills, and other projecting parts of buildings.

Drops. [ᴅᴎoppa, Sax.] *In architecture.* Small cylinders or truncated cones used in the mutules of the Doric cornice, and in the member immediately under the triglyph of the same order. They are called guttæ by the old writers on architecture, and were intended originally to represent drops or tears flowing from the channels and shanks of the triglyphs. Alberti called them clavos, as conceiving them to be in resemblance of nails, but without any reason for his conjecture.

Dry. [ᴅᴎɪʒ, Sax.] *In painting.* Cold, barren, without feeling. *A drawing* is said to be hard and dry when its outline is too forcibly expressed, meagre, and in bad taste, the opposite to free, undulating, round. *A picture* is said to be dry in style when its colouring is meagre and ill arranged, the very opposite to "the bloom of beauty and the warmth of life." Hayley. This fault may also arise from too close an attention to the antique, and a neglect of nature. No great artist has succeeded so well as Poussin in giving a grace even to the driest pencil of the great masters. "No works," says Reynolds, "of any modern artists have so much of the air of antique painting as those of N. Poussin. His best performances have a remarkable *dryness of manner*, which, though by no means to be recommended for imitation, yet seems perfectly correspondent with that ancient simplicity that distinguishes his style. Poussin, in the latter part of his life, changed from his *dry manner* to one much *softer* and *richer*, where there is a greater union between the figures and the ground, as in the seven sacraments:" now the property of the Marquis of Stafford, and among the most distinguished ornaments of the Cleveland House gallery. Dryness is the fault of the infancy of painting, and often arises from timidity. Richness, fullness, and warmth are to be acquired only by study, which will be much assisted by sketching in oils with full brushes, observing the arrangement of nature, the bloom of beauty, and the richness and harmony of colours displayed in all the works of the creation. Rubens is perhaps the best master to look to for a correction of dryness.

Dusseldorf. *In the history of the fine arts.* A town of Germany very celebrated for its artists, and collections of works of art. It was recently the capital of the Grand Duchy of Cleves and Berg, and is situated on the Rhine, near its confluence with the river Dussel. The streets are regular, clean, and spacious, the houses lofty, and the public buildings numerous and handsome. The principal objects of curiosity are *the Hotel de Ville, the equestrian statue of John William*, Elector Palatine, by Gripello; the hotel of the former government, the barracks, which were built by the Elector John William, and hold eight battalions, each of which has its particular church; the collegiate church, containing a marble monument of the Duke John; the cidevant church of the Jesuits, which is the finest in Dusseldorf, the convent of Franciscans, the hospital for paupers, the five fauxbourgs, particularly the fauxbourgs of Neustadt, and the market place and Charles' Square. The fortifications of the town were demolished during the war of the revolution; and the castle, which is now a heap of ruins, was burned in the bombardment of 1794.

Dusseldorf possesses an academy of painting and design, and a college; but it has been chiefly celebrated for its splendid gallery of paintings. This gallery was carried off to Munich, and nothing was left but a single picture of Cignani or Rubens, painted upon wood. It has lately been sent back to the town; and it contains the chef d'œuvres of Vandyck, Vanderwerff, Rubens, and other Flemish masters. The collection of plasters and designs belonging to the academy, and the physical cabinet of the college deserve also to be noticed.

At the distance of about half a league from the town stands the convent of La Trappe, where the religious inhabitants manufacture and sell snuff boxes with ciphers, which are held in high estimation. An account of the Dusseldorf gallery of paintings will be found in the *Galerie Electorale de Dusseldorf*, par Nicolas de Pigage, Bale, 1777, folio; and engravings of them in the almanack of M. Molin, entitled *Niederrheinisches Taschenbuch*, which is published annually.

Dutch masters, school, &c. *In painting.* See School.

Dwarf. [ᴅᴩeoᴎᴇ, Sax.] *In painting and sculpture.* A man or woman below the common size. Among the ancients, the rich were accustomed to keep dwarfs among their slaves; some of whom were as notorious for their ugliness as for their dwarfish size. This taste is of very an-

cient date, and was most prevalent in Greece in the degenerate days which succeeded Alexander; and in Rome under the degenerate times of their emperors. Casaubon has collected many curious documents relative to this unfortunate race of beings in his remarks upon the 83d chapter of Suetonius's Life of Augustus. They distinguished between the genuine dwarfs which they called *nani*, and *pumili* or *pumiliones*, who were but men of small stature, but otherwise well proportioned; and those little monsters with great heads that are spoken of by Suetonius, and which they called *distorti*. The dwarfs were a species of pigmies, which the cruel art of the orientals produced in many instances by artificial means. Longinus speaks of a species of box or press, in which they kept their dwarfs while young to prevent their growth; and Pliny also mentions having seen such machines of cruelty. They seem to have preferred the ugliest little dwarfs, with large heads and other similar distortions of nature. Athenæus describes them under the appellation σιλπωνος, in his accounts of the luxury of the Sybarites. These little unfortunates were taught to dance and play the crotola, a species of castagnette. Some of them so engaged are represented among the bronzes found at Herculaneum, and engraved in the second volume, plates 91 and 92, and in the Recueil de Caylus, tome vi. pl. 93. The Roman ladies were fond of dwarfs as attendants; and often put them in combats as gladiators, who were then called *pumiliones*. Domitian matched them publicly in the amphitheatre against women of full stature. See Pigmy, Crane.

E

Eagle. [*aigle*, Fr.] *In sculpture, architecture, and the mythology of the arts.* A bird of prey, called the king of birds, said to be very sharp-sighted. Also a Roman ensign in the shape of an eagle, made of gold or silver, of which every regiment had one. Representations of this noble bird, which the ancients gave as one of the attributes of Jupiter, are found sculptured on various antique capitals; as on those of the temple of Septimius Severus, and always on those of Jupiter. It was also much used by the ancients in the friezes of their temples and other architectural sculptures. It is also found on numerous medals, and in fine character on those of Agrigentum. The ancient gem sculptors have left many fine representations of this bird on various precious stones, particularly on sardonyxes, of a fine size and great beauty. They seem to have preferred this stone to others on account of the colour of its laminæ according with the figure of the bird, formed a suitable ground to relieve its wings. The finest are in the Imperial Cabinet at Vienna, especially in cameo; and in the cabinet of antique gems in the Royal Library at Paris, where is a splendid one of the apotheosis of Germanicus. There are also some very grand sculptured eagles on the pedestals of many of the ancient columns at Rome.

In Grecian architecture the word eagle (ἀετὸς), is also used for the frontispiece or pediment of their temples. See Aetos. As Wheler, in his description of the Propylea at Athens, says, "the *eagle* of the front was sustained by four pillars of the Doric order." Pausanias says also the sculptures of the Parthenon were placed in the eagles (ἀετοις), and the celebrated Athenian inscription in the British Museum, that was brought to England by Dr. Chandler, also calls the slabs which form the face of the tympanum of the pediment Ἀετεαιοι λιθοι. See Aetos, Pediment, Tympanum, Fastigium.

Ear. [eare, Sax.] *In painting, drawing, and sculpture.* That part of the organ of hearing which stands prominent. The human ear is perhaps the most difficult part of the whole figure to draw well, and to affix in its proper situation. Much of the character and expression of the head depends upon it, particularly as concerns beauty or deformity. Ælian, in depicting the beauty of Aspasia, describes her ears as small and well shaped; and Martial places large ears among marks of deformity. Agostino Caracci considers the ear as the most difficult to represent of the whole human form. He therefore modelled one in relief much larger than nature as a study, which he drew from in every position. It was from this model that were made those casts well known in the continental academies as the *Orecchione d'Agostino.*

The ear has always been wrought with the greatest care by the ancient sculptors. In fact, to such perfection that Winckelmann says, by a fragment of a mutilated head, if it afford but the ear, we may judge with certainty of the beauty and style of the entire statue; and of those where the

workmanship is of inferior style or of doubtful antiquity, the ear will always decide. In the first place, a beautiful ear vouches for its antiquity, as an ill worked one has never reached us from their best times; and modern artists, who have restored antique statues, have always failed in giving so beautiful a representation of the auricular organ as the ancients. In the second instance, the ear, in all genuine antiques, participates in character with the whole work, of which it forms a sort of attribute, and will always detect the restorer's hand.

A particular or characteristic form of ear is always found to belong to the statues of the ancients; and those of Hercules are particularly marked. The ears of this god are always small, attached close to the head, and flattish; the cartilage, particularly that portion of it which is called *antihelix*, is swoln, which narrows the opening of the cavity of the tympanum, and is marked with distinct ridges. The ears of fauns, bacchanals, and satyrs are thus made pointed more or less at the superior extremity, denoting their various degrees of sensual or animal propensities. The statue of Hercules of gilt bronze in the Capitol, together with six others of marble, namely, those of the Belvedere, the Villa Medici, the Palazzo Mattei, the Villa Borghese, the Villa Ludovisi, and that in the gardens of the Borghese palace, have each of them their ears formed as just before mentioned. Some of the fine antique statues representing figures of Pancratiastes, which were the works of Myron, Leochares, and other eminent sculptors, as well as the fine one of Autolycus, are all characterized by this sort of ear: which may also be observed in a colossal statue of Pollux at the Capitol, and in a small figure of the same hero at the Farnese palace. The right ear of the pretended gladiator of the Villa Borghese has this form, while the left, which is a restoration, differs. The Villa Albani possesses a fine statue of a youthful hero, with this conformation of the ear; which is also observed in one of the Dioscouri at the Capitol; as well as in all of those which represent persons who have been celebrated in gymnastic sports, wrestling, &c.

It is not surprising that this characteristic is constantly assigned to the heads of Hercules, when he is considered as the founder of the Olympic games, which he rendered celebrated by his feats of address and strength. Winckelmann thinks that this character is always given to gymnastic heroes, in spite of the statue of a wrestler, of black marble, who holds a phial of oil in his hand, and of a basso rilievo of another, which is designated by the *strigil* and the bottle of oil, both in the Villa Albani, which have neither ears of this peculiar form. A fine colossal head of Hercules in the Towneley gallery exhibits them in great perfection. These observations are confirmed by various other antique statues, and by various passages in Plato, Lucian, Philostrates, and Diogenes Laertius.

There is another characteristic by which, according to Buonarotti, we may recognise the heads of divinities; which is by the earrings, or by having the ears pierced for such purpose, a particularity which he pretends never to have found in the busts of mortals, whether they were of the rank of empresses, or of other celebrated females. This assertion, however, is refuted by Winckelmann, who cites many authentic proofs to the contrary in the heads of well known personages; such as of Antonia, the wife of Drusus, and the bust of an aged female in the gallery of the Capitol, and a Matidia in the Villa Ludovici, which have all their ears pierced. Dion relates of Macrinius that he had his ears pierced and wore earrings, after the fashion of the Moors, an ancient and common practice among eastern nations. Yet the statue of that emperor of African origin, which is published in *Museo Pio Clementino*, vol. iii. pl. 12, has not this particularity. Visconti mentions, as a remarkable instance of this practice, the fine bust of Caracalla in the Villa Borghese, which is affixed to a statue of Hercules, and has the right ear pierced.

It was a prevailing custom of the ancients to consecrate or dedicate various parts of the human body. Such votive members are to be found in all the collections of antiquities, and there are several in the Elgin gallery at the British Museum. Votive ears have been discovered in this number, as may be seen in Montfaucon's Supplement to his *l'Antiquité Expliquée*, tom. ii. pl. 32, No. 1, where he has figured and described two such, upon which he found remains of gilding. They were perhaps dedicated or presented to the temple of some deity on a recovery from deafness.

The ancients were in the practice of attributing the seats of various virtues to different parts of the human body. The forehead and the face were assigned to *modesty*, or pudicity; the right hand to *good faith*; the knees to *compassion*; and

the ear to *memory*. It was customary with them as a formulary to touch the ear of one to avert any expected ill, or to recall a fact to his memory. It was for this that they touched the tip of the ear of those who were called to bear witness. It was with them also a mark of tenderness from children to their parents, lovers to their mistresses, to kiss and touch their ears. There are numerous passages in ancient writers, and sculptures on precious stones, in corroboration of these facts. Justus Lipsius describes one that he had seen at the brothers Mark and Guy Laurin, on which was represented a head, which a hand was holding by the ear, and inscribed in Greek "*Remember*." Rævard, Gravina, and Heineccius have also described it. Spon has figured two onyxes, of which one (Miscellan. p. 297, No. 5) represents a hand holding an ear, with an inscription in Greek to the same effect as the last; and the other a similar representation with a Greek inscription intimating "*Remember thou thy good fortune*." Ficorini, in his *Gemmæ Literaratæ*, pl. 5, No. 12, has published a representation of a sardonyx, on which is a hand, of which the forefinger is united to the thumb, inscribed also in Greek with the word *Remember*. Gori has given the representation of a similar stone, with a hand holding an ear, and a parallel inscription. There have been found many other like sculptures and inscriptions which are described by Gori, Millin, Gravina, and other antiquaries. See ALLEGORY, ATTRIBUTES, VOTIVE.

EASEL. [from *ease*.] *In painting*. A frame used to support a picture while it is being painted. They are of various forms and sizes, according to the size of the picture and the habits of the painter.

EATING-ROOM. [from *eating* and *room*.] *In architecture*. A room designed and set apart for the purpose of eating. See DINING-ROOM.

EAVES. [eɹeɹe, Sax.] *In architecture*. The edges of the roof which overhang the house. The ancients generally formed gutters just above the extremity of the eaves in that part of the cymatium which is terminated by the upper fillet. They were ornamented by the ends of the joints that extended from the ridge to the eaves, as in the Erechtheium at Athens, which has been recently copied in the new church of St. Pancras, near Tavistock Square. These ornamental eaves, joint-tiles, or stones, are called, in the celebrated Athenian inscription at the British Museum, which relates to the building of the Erectheium, Γογγολοι λιθοι, which Mr. Wilkins, as I think correctly, imagines to be the upright circular pieces, which terminated the joint-tiles at the eaves or gutters of the roof. The water was in some examples thrown off from the building through the mouths of lions' heads, sculptured on the cymatium. In some temples the circular ornaments on the eaves were formed, as well as the common or flat tiles, of clay. The *imbrex* or eaves-tile of potter's earth was called by the Greeks στογγυλοειδὴς or γογγυλοειδὴς κέραμος; when made of marble the word λίθος would probably be substituted, as in the Athenian inscription, for κέραμος. The joint-tiles are also mentioned in another part of the same inscription, where they are called ἁρμοι. In laying the tiles the rows at the eaves or gutters are first placed, and then other rows in succession up to the ridge. The ἁρμοι were laid in the same order of succession one above the other.

The tiles at the eaves or gutters were formed by the Greeks in the top bed of the cornice, behind the upper fillet of the cymatium, commonly in blocks twice the length of the other tiles; consequently there was no joint corresponding to that between the two tiles of the next superior course. The eaves itself, or superior extremity of the cornice where it met the lower portion of the roofs was called by the Greeks Γεισα, upon which member of the cornice the mouldings were carved. Modern architecture, particularly as practised in London, has rejected the dripping eaves for the less architectural cornice, with its *harmi* and sculptured spouts; which, however, are sometimes added, without use, and consequently, without meaning.

EBONY or EBENY. [*ebenum*, Lat. Ἔβενος, Gr.] *In sculpture*. A hard, heavy, black, valuable wood, which admits a fine gloss, and was much used by the ancients in sculpture. It is not easy now to determine exactly what is the precise wood which the ancients called *ebenum*, of which Theophrastus is the earliest writer who mentions it. We only know that it was a black, hard, and heavy wood, which Pliny, with others, conceived bore neither leaves nor fruit. Its known qualities, however, rendered it valuable for the purposes of carving. That which the Greeks used in their most ancient times was procured from India; but it was unknown in Rome till after the victories obtained by Pompey over Mithridates. The ancient inhabitants of India, the Greeks, and finally the Romans, made frequent use of this fine wood, inlaying it with ivory on account of the

contrast of colours. Pausanias and Pliny mention several statues of ebony, particularly a statue of Ajax at Salamina, those of Castor and Pollux, with their wives Hilaria and Phœbe, and their children Anaxis and Mnasinous, in the temple of Castor and Pollux at Thebes, the works of Dipænus and Scyllis. Their horses, too, were of ebony, except a portion of their trappings, which was of ivory. Pausanias speaks also of an ebony statue of Diana at Tegea, in Arcadia, of the earliest times of art; and of an Apollo Archegetes at Megara. According to Pliny the statue of Diana at Ephesus was also of ebony, but according to Vitruvius it was of cedar. Artists and poets have used ebony allegorically for the attributes of the infernals, giving a throne formed of it to Pluto and Proserpine; and made the gates of hell of the same dark and durable material. It is also used at the present day for sculptural decorations, embellished and inlaid with ivory, mother of pearl, silver, and gold.

Eborarius. [Lat.] *In ancient sculpture.* The name given by the Romans to their works in ivory, whether as turners or sculptors. Spon mentions an ancient inscription wherein the word is found. See Ivory.

Ecbatana. [Ἐκβάτανα, Gr.] *In the history of architecture.* The chief city or ancient metropolis of Media, built, according to Pliny, by Seleucus. It was the summer residence of the Persian and Median kings, and existed in great splendour at a very early period in the history of the world. Diodorus Siculus ascribes its origin to Semiramis, and speaks of many astonishing works completed by that heroine for the embellishment of the city, and the convenience of the inhabitants. It was generally considered, however, as having been founded by Deïoces, king of the Medes, who is called, in the book of Judith, Arphaxaæ, and the first who reigned in Media after that country had shaken off the Assyrian yoke. It was situated on a rising ground, about twelve stadia from Mount Orontes, and twelve hundred stadia south of Palus Spauta. Its walls are described by ancient writers in a style of romantic exaggeration, and particularly by Herodotus and the author of the book of Judith. According to the former, they were seven in number, all of a circular form, and gradually rising above each other towards the centre of the city; the first or outermost of which, about one hundred and seventy eight furlongs in circumference, had white battlements, the second black, the third purple, the fourth blue the fifth deep orange, the sixth was covered with silver, and the seventh, which enclosed the royal palace, with gold. According to the latter, these walls were seventy cubits high and fifty broad; the towers on the gates sixty cubits broad at the foundation, and a hundred in height; and the whole built of hewn stone, each stone being six cubits in length and three in breadth. Daniel is said by Josephus to have built one of its most magnificent palaces, some of the beams of which are of silver, and the rest of cedar plated with gold. This splendid edifice afterwards served as a mausoleum to the kings of Media; and is affirmed by the last mentioned author to have been entire in his time. There are no traces now remaining of these lofty buildings; and even the site of this celebrated city has become a subject of dispute among modern travellers. Sir John Chardin fixes upon Tauris as the most probable situation; but, at the same time, admits that no remarkable ruins are to be seen there; and that the materials of those which have been found are different from those which the Medes employed in the structure of their palaces. Others suppose it to be Hamedan; and some Gasbin in the province of Yerrack. Merodach, whom some suppose to have been Nebuchadnezzar, overthrew Deïoces, and defaced his capital, A. M. 3347; and it was more fatally pillaged by the army of Alexander, A. M. 3725. See Ancient Univ. Hist. vol. v. p. 4; Judith, c. i. v. 2. 4; Herodotus, l. i. c. 98; Chardin, *Voyage en Perse*, tom. i. p. 181; Josephus, *Antiq.* l. x; Quint. Curt. l. v. 8.

Echea. [Ἠχεῖα from ἠχέω, I sound.] *In ancient architecture.* The name which the ancients gave to the sonorous vases of bronze or earth, of a bell like shape, which they used in the construction of their theatres, to give greater power to the voices of their actors. The size of these vases were proportioned to the magnitude of the building, and their conformation such that they returned all the concords from the fourth and fifth to the double octave. They were arranged between the seats of the theatres in niches made for the purpose; the particulars of which are described in the fifth book of Vitruvius. According to this ancient author, such vases were inserted in the theatre at Corinth, from whence Lucius Mummius, at the taking of that city, transported them to Rome.

It would appear that similar means have been employed in some of the Gothic cathedrals, to assist the voices of the priests

and choristers; for in the choir of that at Strasburgh, formerly belonging to a monastery of Dominicans, Professor Oberlin discovered similar vases in various parts of the vaulted ceilings.

The student is referred to Mr. Wilkin's translation of Vitruvius for further speculations on this curious mode of construction.

Echinus. [Lat. ἐχῖνος, Gr.] *In architecture.* A moulding or ornament in the shape of a chestnut, used in the ancient Doric entablature and capital. Its form is eminently beautiful, and of infinite superiority to the ovolo or quarter round of the Roman Doric.

Edifice. [*ædificium*, Lat.] *In architecture.* A fabric, building, or structure. The word *edifice* is used in a higher sense than *building*, being generally applied to works of a monumental, grand, or public nature; and the phrase *a public edifice* is more appropriate and euphonical than that of a public building. To constitute a public edifice it is not requisite that it should be devoted to public usages, but that it should have been erected at the public expense; as palaces of sovereigns, episcopal residences, votive mansions like Blenheim, houses of public functionaries, &c. Public edifices should be the principal ornaments of a city, should be splendid, durable, and in good taste. Substantial and scientific construction, good and handsome materials, and tasteful design, rather than an extravagant and uncharacteristic costliness, should be the prevailing feature of every public edifice.

Of all nations the Greeks and Romans have surpassed all others in the good taste, beauty, splendour, and costliness of their public buildings. The Romans, in particular, are celebrated for their lavish extravagance in this particular, which has given them a deathless reputation that exceeds even their prowess in arms, and almost boundless conquests. They not only embellished their capital with public edifices of every kind, but also all their provincial towns and colonies. The erection of such buildings was part of their policy, not only to raise their name and celebrate their deeds, but also to employ their numerous soldiery and bands of slaves. The public edifices of the republic are discussed in the article Architecture; but they fell infinitely short of those which were erected by their emperors. Augustus made Rome resplendent with marble. Suetonius (in Augusto, cap. 28), records his munificence in public works, and his proud boast of having converted Rome from a city of brick to a metropolis of marble. To him Rome owes her grandest Forum, surrounded by stately porticoes, for the use of the people. (Suet. in Aug. cap. 29). He built also the temples of Mars near the Forum, and of Apollo on the Palatine hill, which he accompanied by a grand and fine library of the best works in Greek and Latin; as well as that of Jupiter Tonans in the Capitol, and restored many other useful and ornamental structures for the public use. So numerous and splendid were his buildings and restorations, that Suetonius, the historian of the twelve Cæsars, in his Life of Augustus (cap. 30), says, "Ædes sacras vetustate collapsas, aut incendio absumptas refecit, easque, et cæteras, opulentissimis donis adornavit." Augustus possessed so much public spirit that he delighted, above all things, in restoring and repairing the public edifices of his illustrious predecessors, who by their talents, prowess, and virtue had rendered the Roman empire great and flourishing; and his modesty was such, that he always reinstated the original inscriptions, without permitting any mention of his own among them. Suetonius bears willing testimony to these great qualities of Augustus in his 31st chapter, saying, among other just eulogiums, "Proximus à diis immortalibus honorem memoriæ Ducum prestitit, qui imperium P. R. ex minimo maximum reddidissent. Itaque et opera cujusque, manentibus titulis, restituit."

Besides these, he erected many other public edifices, which he inscribed with the names of others. Such were the porticoes of Livia his wife, and Octavia his sister; the basilica of Lucius and Caius his grandsons; the children of Agrippa and Julia; the theatre of Marcellus. These are the public edifices to which Suetonius alludes (ibid. c. 29), when he says, "Quædam enim opera sub nomini alieno, Nepotum scilicet, et uxoris, sorisque fecit."

Not content with thus decorating Augustan Rome, this first of its emperors used all his influence with his opulent and public spirited countrymen to lend their aid in this magnificent enterprise. He especially exhorted those to whom the honour of a triumph was decreed, to bring to Rome some splendid work of foreign art, to decorate anew certain public edifices, or repair the old and decaying. Suetonius and Dion Cassius both bear witness to it; the latter (l. 54), saying, "Iis, qui triumpharent mandavit, ut in rerum à se gestarum memoriam aliquod opus ex manubiis facerent." It was in pursuance of these commands that Marcius Philippus

built the temple of Hercules and the Muses; Lucius Cornificius that of Diana; Munatius Plancus that of Saturn; Asinius Pollio the magnificent entrance and court to the temple of Liberty; Cornelius Balbus his theatre; Statilius Taurus, his amphitheatre; Paulus Emilius his basilica; and Marcus Agrippa his Pantheon and aquæducts. "Quorum accuratissimam diligentiam Marcus Agrippa egit, qui urbem pluribus aliis monumentis adornavit," says Strabo on this subject. Lib. v. Geog.

The great roads and public ways of the Roman empire became objects of the care and munificence of Augustus, but they do not belong to its public edifices. Thus did the Roman empire, under the reign of Augustus alone, become as splendid in its public edifices as it had been before for the number and extent of its conquests, and to use the words of Virgil, (2 Georg.) "Rerum facta est pulcherrima Roma."

Tiberius built no public edifices worthy of notice, for having begun a temple in honour of Augustus, and the reparations of Pompey's theatre, he had not the spirit to finish them; but left them to be completed by the equally mean-spirited Caligula, who began nothing anew in Rome but an aquæduct and an amphitheatre, which he did not live to finish. See Suetonius in Calig. cap. 21. Claudius did but little more towards the public edifices of the city of Rome, but embarked in several grand public enterprises, such as the emissarium of the Fucine lake, and the forming of the port of Ostia. Suetonius bears witness to his public spirit in the following passage (in Claud. c. 20), "Opera magna potius, quam necessaria, quam multa perfecit: sed vel præcipua, aquæductum à Cajo inchoatum. Item emissarium Fucina lacus, portumque Ostiensem." He, however, made the course of the Circus Maximus of marble, that was originally of common stone, and renovated and gilt the meta of the same edifice.

The principal public edifices of Rome may be classed under the numerous temples, circuses, theatres, amphitheatres, curiæ, basilicæ, &c. which abounded in their empire; and those of Greece, of temples, odeons, theatres, courts of justice, &c. Those of Rome were the most numerous, costly, and colossal; those of Greece in the best taste. The public edifices of Rome were built at the expense of their emperors and private citizens of great wealth, and those of Athens at the united expense of all Attica.

The real magnificence of public edifices depends particularly upon the taste with which they are executed more than upon the money that they may cost; so true is it what the poet says,

"Taste, never idly working, saves expense."
THOMSON.

EDILE. [*ædilis*, Lat.] *In ancient architecture.* An officer under the Roman government, whose duties were to see that temples, houses, conduits, streets, and highways were kept clean, safe, and in good repair. A sort of ancient surveyor general, or master of the public works. According to Varro (lib. iv. de lingua Latinâ), "Quod ædes sacras, et ædificia publica procuraret." Cicero gives him, in addition, the care and direction of the public games. He was also inspector of all the public ways, had the direction of the streets, public and private edifices, and other similar duties, having proper executive officers as quæstors, curators, &c. See CURATOR, QUÆSTOR.

EFFECT. [*effectus*, Lat.] *In all the arts.* That which is produced by an operating cause. In works of art critics use this word to indicate the appearance that is produced or is the result of their execution. When the substantive *effect* is used without an adjective; as, that picture, that edifice, or that statue has effect, it is always understood as laudatory and as meaning a *good* effect; or is in itself effective, producing the desired effect.

Effects in painting are various, particularly in the class of landscape painting. The effect of a picture is the sensation or sentiment with which it inspires the spectator, while the effect for a picture is that which is created in the mind of the artist. A landscape or view of any particular spot varies according to the accidental effect which is produced by the season, the time of day, and the weather. A cloudy, a sunny, a moonlight effect will make three separate pictures of the self-same outline. This was beautifully and effectively elucidated in De Loutherbourg's Eidophusikon, and in the landscape of the valley of Saarnen, as exhibited with changing effects at the Dioramas of London and Paris.

The effect of an historical picture is the result of a nobler sentiment and a higher cause. Effect in this highest branch of painting is produced by a correct display of the action of the picture and the passions that are thereby elicited, aided by the accessorial effects of the scene or passing time in which the story is supposed to have happened. Macbeth's mysterious interview with the witches; his agitation

in the chamber of Duncan, and his seeing the ghost of the murdered Banquo at the festive banquet, must have different natural effects given to the picture to produce the consequence intended by the poet and the painter. The effect of Raffaelle's cartoons depend on the exercise of the highest powers of the imagination; the effects of Rembrandt and Salvator, on a correct observation of the accidental or passing scenic effects. See ACCIDENTAL. The former are more mental and characteristic, the latter more mechanical, more dependent on accidents of light and shade, colour or scenery, and more delusive as to effects of nature.

Architecture has its effects as well as the other arts. It produces its effects from a parity of causes; and receives its effects in a similar manner. Its effects depend on good sense, taste, science, learning, and a knowledge of its laws and efficient causes. They are produced by a judicious use and application of its ornaments, its breaks, heights, projections, orders, and embellishments. Propriety is a grand cause in producing effect in architecture, and impropriety or a bad application of what is otherwise good in itself, as a theatrical style to a church, or a religious one to a banqueting house, an equally powerful cause of failure.

Effect in architecture also depends much upon execution, somewhat upon material and ornament, but more upon an intellectual refinement of taste, that distributes all the components and necessary parts of a building into their proper places, arranges them in a characteristic manner, and disposes of the chaotic members of a large edifice in such a manner as to produce an effective whole. See COMPOSITION, DISPOSITION, DISTRIBUTION.

EFFIGY, EFFIGIES. [*effegies*, Lat.] *In painting and sculpture.* Resemblance, image in painting or sculpture, representation, portrait of a person. See PORTRAIT, BUST.

EGG. [œȝ, Sax.] *In architecture and sculpture.* An ornament fashioned in the shape of an egg. The egg has been from time immemorial among the ancients the symbol of the being who createth all things, and hath all things within himself. It is to be found placed on all the statues of Mithras, upon his altars, and in many ancient votive hands of bronze. Montfaucon has given the representation of a statue of Isis in his Supplement de l'Antiquité Expliquée, tome 1, pl. 38, No. I, between the horns of which is placed an egg. The Egyptians also held it in profound veneration, and, in conjunction with the serpent, held it as representing the mystery of creation, or the mundane globe, or time, and the serpent of eternity. On several of the engraved gems published by Stosch, are sculptured two crested serpents, raised upon their tails, with the mystical egg between them. From the Egyptians the egg and serpent's tongue crept into the architectural sculpture of Greece, and forms one of their most elegant ornaments. It is still much used, and called the egg and tongue ornament. See ECHINUS.

EGG and TONGUE. *In architecture.* A graceful ornament sculptured between the volutes of the Ionic order, which may be represented, if traced back, as is done by M. Quatremere de Quincy (see ARCHITECTURE), to the head of Isis, to represent a mystical collar or necklace of the mundane egg and the tongue of the serpent of immortality. It is also used in the entablature of the same order with great effect, as in the Erectheium. See IONIC.

EGIS. See ÆGIS.

EGYPT. [*Ægyptus*, Lat. Αἴγυπτος, Gr.] *In the history and archaiology of the arts.* A country of Africa, said by ancient poets and historians to have been named after Ægyptus, the son of Belus, and brother of Danaus, who was their first king. It is divided by Pomponius Mela, from ancient authority, into two parts. The lower, called Delta, from its triangular shape, and the other Thebais, or Upper Egypt. It is celebrated for the invention of many of the useful and the fine arts, as physic, astronomy, husbandry, architecture, sculpture, painting, natural magic, and other mysterious sciences; insomuch that several learned men of Greece, as Pythagoras, Plato, &c. travelled thither in search of knowledge. How magnificent it has formerly been its vast pyramids and other colossal structures yet remaining show.

Egypt is one of the most ancient nations of whom we have authentic records, and was the birthplace, or, at least, a very early protector of all the arts and sciences. Herodotus, the patriarch of history, proves it to have been the source whence the Greeks derived their knowledge, their arts, their sciences, and their literature. Menes is the earliest king of Egypt of whom we have more than poetical or fabulous account; but the circumstances of his reign distinctly imply, that the age in which he lived was an advanced period of the Egyptian history. The arrangements which he made do not belong to a rude and uncultivated period; the wealth and splendour of his court were far removed

from the savage state, and the magnificence which he introduced into the services of their religion manifest an improvement in the arts, and a progress in the splendour of society. Sir Isaac Newton ascribes to this king the building of Memphis, which was not founded, or, at least, not famous in the time of Homer; for it is Thebes, and not Memphis, that he celebrates as the glory of Egypt.

Osymandias is the next Egyptian king of whom we have any probable account; and yet the narrative of his reign is doubtful and imperfect. While he was upon the throne the city of Thebes was still in its glory, and some of its most splendid monuments of art are attributed to him. His palace is reported to have been an edifice of extraordinary beauty, and, in the manner of those times, of vast extent. Among other ornaments of this splendid building were three colossal statues of immense size, which, as in the infancy of science every thing is vast, is sufficient to show the antiquity of the reign of Osymandias.

Mœris is another prince who, in passing by other sovereigns of obscure history, has rendered his name celebrated by the splendour and extent of his public works; among which are the formation of the celebrated lake which bears his name, and has preserved his memory; and the decoration of the temple of Vulcan at Memphis. He was the three hundred and thirtieth king from Menes, and the immediate predecessors of the well known and celebrated Sesostris.

Sesostris is perhaps the most celebrated of all the Egyptian kings, and has had attributed to him the vices and great public spirited actions of many of his race from the Pharaoh, who was drowned in the Red Sea, to the Sesac or Shishah, who captured Jerusalem in the reign of Rehoboam. According to all accounts he was a great, a prudent, and a successful sovereign. By prudent conduct and salutary arrangements he preserved tranquillity among his subjects; by excellent management he attached the army to his interest; and he provided for every department of the state with judgment and care. He divided his empire into thirty-six provinces, and having appointed a governor to each, he constituted his brother regent of the kingdom, with supreme power, till he himself should return. He kept up great armies, made extensive conquests in Ethiopia, all over Africa, and even reached the shores of the Atlantic. He penetrated Asia, crossed the Ganges, returned into Europe, and invaded Scythia as well as Thrace. After these conquests, many of which he abandoned, Sesostris returned home, exiled his brother for rebellion and malversation of office during his regency, and employed his whole time, as well as his riches, in the adorning his kingdom, and improving the condition of his people. He provided for the repose of his companions in arms, enriched, repaired, and ornamented the temples of the gods, and beautified his whole country with splendid public and private edifices.

After a long period abundant in fable we come to Cetes, who is called by Greek authors Proteus, and is celebrated in ancient fable as the son of Oceanus and Thetis. On account of his wisdom, and perhaps on account of his dexterity in the art of deception, and what was then considered magic and enchantment, he was said to have had the power of changing his shape. Dwelling upon the seashore and cultivating commerce, he was reputed to be a sea god, and to have had the care of the seacalves. Hence Statius calls him *Neptuni pastorem.*

Rhempsis or Rhampsinitus, the immediate successor of Proteus, is mentioned here as having erected an expensive building for the reception of his treasure; being much attached to riches. In times like those in which he reigned, it is natural to suppose that means would be employed to spoil him of his wealth; and the story of Herodotus concerning the device of the architect for giving himself a private mode of access to the king's treasure is unworthy of belief. This king is said to have enlarged and adorned the temple of Vulcan.

After a considerable interval in the history of Egypt, in which we can find nothing concerning the arts worthy of record, Cheops or Chemnis, who is mentioned by ancient historians under a variety of other appellations, is said to have erected the largest of the pyramids. See PYRAMID. His successor Cephrenes erected the second, and other kings of less note embellished the country with grand and splendid edifices.

Egypt continued in a similar state till the ancient race of her kings were extirpated; the claims to the throne being unsettled, and the kingdom feeble, it became a province under the yoke of Persia. Cambyses became its most cruel and bloodthirsty persecutor. He trampled upon their laws, he violated all the prejudices and feelings of the people, he in-

sulted the dead bodies of their ancestors, which were held peculiarly sacred by the Egyptians, and violated the remains of their beloved king Amasis; and spared neither age nor sex nor feelings in his mad career. He seized upon the temple of Jupiter Ammon and violated its sanctuary, he burned and destroyed the buildings and public edifices of Memphis, and proved himself to be one of the most dreadful scourges that could afflict human nature.

After remaining a province of Persia for a great length of time, Egypt was attacked and taken from the power of Persia by Alexander the Great; who founded the city of Alexandria, and otherwise benefited the Egyptians. The story of its founding by Dinocrates is well known to every reader of Vitruvius.

Ptolemy was the next monarch who is found as a patriotic sovereign, although he was not at first honoured with the appellation of king. Ptolemy Soter was of a literary character, wrote the life of Alexander the Great, and was a great lover of science and of the arts. He founded a college which became the abode of learned men; and he formed a library to assist the cultivation of science. The munificence of this king was manifested in the splendid buildings of his museum, as well as in the magnificent temple which he erected to Serapis in Alexandria, as well as in the watch tower of Pharos, which he constructed for the commercial interests of the country. In less than two reigns after this munificent king, Egypt became at first the ally, then tributary to, and lastly, a province of the Romans. The civil wars that happened in the reign of Cleopatra, the widow of Ptolemy Philometer, and of the sons of Ptolemy Euergetes II. surnamed Physcon on account of his corpulence and unseemly figure, destroyed Egypt, dilapidated its temples and other public edifices, and introduced anarchy, rage, and bloodthirstiness, instead of the beneficial influence of the fine arts. Egypt under the Romans flourished, as did all the colonies of that powerful people. Her public buildings, art, and science improved, and she became once more an enlightened and powerful nation. But her day was passed for much improvement in the arts. Being only a province of the universal Roman empire, Rome was the metropolis; and all her public works were comparatively neglected for the aggrandisement of Rome. Rome raised yearly in Egypt alone an immense annual revenue. Strabo mentions having seen, in an oration of Cicero's, that the tributes which Ptolemy Auletes, the father of Cleopatra, levied upon his kingdom of Egypt amounted to twelve thousand five hundred talents a year. "Auletæ patri Cleopatræ quotannis duodenum millium et quingenum talentorum tributum afferri solitum." Strabo, lib. 17. Geog.

During the time of Julius Cæsar, Mark Antony, Cleopatra, and the Roman emperors, till the reign of Dioclesian, the affairs of Egypt were turbulent and precarious. The arts flourished but little, for no one took care even of their religious and national edifices. On the contrary, while Claudius was emperor, the Egyptians were robbed of one of the finest of their obelisks, which was conveyed to Rome, and placed upon the Vatican hill. While Hadrian was emperor of Rome he visited his dominions in Egypt, and remained in that country for the space of two years. He restored many of their privileges of which they had been deprived, he enlarged the museum, reerected many public buildings which had been thrown down, and carried with him the spirit of that love for the arts, and particularly for architecture, which always distinguished this munificent and splendid emperor. He gave his name Hadrianopolis to one of their cities, which still commemorates his benefactions and public spirit. Egypt was also visited by the emperor Severus, who viewed and repaired many of their national monuments, and Dioclesian continued to bestow attention upon it as a province.

The history of Egyptian art now began to draw to a close, for when the Roman empire fell, its provinces declined with it, and when the Christian religion became the religion of Rome, the heathen temples were destroyed, and some of their indecent and lewd emblems were exposed to public view. The Egyptians, however, adhered generally to the idolatry of their forefathers; they assumed a posture of defence, and posting themselves in the temple of Serapis, which was a strong and massy building, they made a stout and long resistance. They were, however, overpowered, and the god Serapis himself shivered in pieces.

Egypt became, after this, interesting in art to antiquaries alone, all her buildings became awful ruins, but of an almost indestructible quality. They have been treated upon in the articles ARCHITECTURE and ARTS, to which the reader is referred for other particulars.

The Egyptians, notwithstanding their partiality for hieroglyphics, never characterized themselves or their country by any

symbols upon their monuments; which, as they related to themselves and their country alone, without a single allusion to any others, they never found occasion for. But the allegorical genius of the Greeks found no difficulties in designating Egypt by intelligible and efficient symbols. The productions of their country, the objects of their worship, their peculiar and national works of art, all had so particular and so distinctive a character, and so totally different from those of every other nation, that any one of them introduced into a composition indicated that the subject bore a relation to Egypt. Their mode of representing the *hippopotamus*, the *crocodile*, the *sphynx*, the *sistrum*, the *lotus* (see these words), are all symbols or attributes under which Egypt is represented on many Roman medals. The pyramids, obelisks, and Egyptian architecture, with sphynxes and crocodiles, have served modern artists for the same purpose; as may be seen in several monuments in Westminster Abbey and St. Paul's Cathedral, particularly in Mr. Westmacott's cenotaph to Sir Ralph Abercrombie, in the latter; and in several of Lord Nelson's, alluding to the signal defeat of the French fleet off the mouth of the Nile.

Egypt is often personified by ancient artists as a female seated, and holding a sistrum, having near to her a basket filled with corn, and sometimes an ibis. Sometimes under the figure of a sphynx with wings, and the aspect of a young and beautiful virgin. These personifications, as was before mentioned, are not of Egyptian but of Roman origin. After the battle of Actium, which placed all Egypt under the power of Augustus, the newly conquered province was designated upon their medals by a crocodile, inscribed ÆGYPTO CAPTA. Upon some fine medallions of Nismes are represented a crocodile chained to a palm tree, which designates the conquest of Egypt by Augustus.

EGYPTIAN ARCHITECTURE. See ARCHITECTURE.

EGYPTIAN. [from Egypt.] *In the history of the arts.* That which belongs to or comes from Egypt, or is in the Egyptian style. The character of the face of the great sphynx at Ghiza induced Volney to suppose that the ancient Egyptians were of Ethiopian origin. The Egyptian style of art is peculiarly national and characteristic, as may be seen by referring to the articles EGYPT, ARCHITECTURE, PAINTING, SCULPTURE, STYLE, and to the various works with engravings mentioned in the several articles.

EIKON or ICON. [*icon*, Lat. Εἰκών, Gr.] *In the history of the arts.* According to Pliny and other ancient writers on art, this word means generally a resemblance, a picture, a portrait, or the statue of an individual. In Greek inscriptions it means a portrait or a statue of a citizen, which a city or a confederation erected in some public place in honour of his public services.

EKKYKLEMA. See EXOSTRA.

ELÆOTHESIUM. [Lat. Ἐλαιοθέσιον, Gr.] *In ancient architecture.* The name of the apartment in the ancient baths, in which, according to Vitruvius, the bathers used to anoint their bodies when they left the bath. It was situated by the side of the frigidarium, and is sometimes called unctuarium. See BATH.

ELECTRUM. [Lat. Ἤλεκτρον, Gr.] *In ancient gem sculpture. Electrum*, according to Ovid, was that resinous substance now called amber; of which there are two kinds, the white and the yellow. The yellow transparent sort is the most admired, but the opake variety, of a yellowish colour, is not uncommon. Sometimes its colour approaches to a hyacinthine red. Also, according to Pliny (lib. 30, cap. 4), a mixture of gold and silver, of which the fifth part was silver. According to other ancient writers, they had three varieties of substances called *electrum* that were used in the arts; namely, glass, a compound metal, and succinum. In the Homeric poems electrum is often mentioned, which seems to have been succinum, the yellow or white amber. According to Eustathius, the ancients used sometimes to call gold by this name, probably from its brilliancy, the word Ἠλέκτωρ signifying the sun. The compound metal which Pliny calls electrum, and its proportions, are mentioned above; he observes that it is more brilliant and resplendent than pure gold. Pliny also thinks that this compound metal or alloy is the same that Homer mentions in the fourth book of the Odyssey, in describing the palace of Menelaus, which he says was ornamented with gold, *electrum* (Ἤλεκτρον), silver, and ivory. But there is reason to believe, says Millin, that if the electrum of Homer was a metallic alloy or compound metal, Homer would not have omitted it in his description of the shield of Achilles. Some writers, among which is the scholiast upon Aristophanes, suppose that the electrum of Homer was glass, but there is nothing in any of his works to warrant such a supposition, for glass is not designated by any character. It is more probable that electrum was yellow amber, which has a re-

splendent sunny brilliancy according with its Greek name; and Herodotus mentions that succinum or amber was known to the ancients.

Concerning Pliny's account of the compound metal of gold, with a fifth part of silver, which he calls electrum, he is corroborated by Isidorus as to the quality and compound, except in their respective quantities; the latter giving two parts of gold to one of silver to his electrum. There are many ancient coins of this rich alloy, the principal of which are some of the kings of Bosphorus, some small ones of Syracuse, and many Celtic and of ancient Gaul. Gold alloyed with silver they called *electrum;* with copper, *aurichalcum* or *chalcolibanos*.

Elegance, Elegant. [*elegantia, elegans,* Lat.] *In all the arts.* A species of beauty rather soothing than striking; beauty without grandeur; pleasing with minuter beauties, and without elevation. Elegance in art does not imply that which is distinguished by ornaments; which, if distributed in profusion and in good taste becomes richness, and if without judgment, disorder or confusion. Elegance, on the contrary, like taste itself, depends more on manner than matter; and, like taste, does not consist in expense. Elegance may be found in a cottage where expense cannot enter, and may be missed in a palace where want, in the slightest degree, was never heard of. In literature a discourse or essay is said to be *elegant* when the arrangement of the subject, and the selection of the words and phrases are well chosen, and express the meaning of the author, rather happily than forcibly, more in the way of an admirer than an able professor, more like an amateur than an artist. Thus the discourses of Sir Joshua Reynolds are more elegant than learned, those of Coypel more practical than elegant, those of Opie more forcible and energetic than either, and those of Fuseli more critical and, in some places, powerful, energetic, and cynically satirical than attractive. The harmony of language, with a species of polish and elegance, like his paintings, seem to have guided the pen of Reynolds: a desire of communicating all that he knew the mind of Coypel: Opie found himself in a new world, and that he only had to say, Do thus—and you will do it—instead of enplaining first principles and didactic method: and Fuseli, the energetic, the erratic, the original, and critical Fuseli, to censure, laugh at, and expose the weaknesses of imbecility, and to laud genius, "to deter rather than to delude," to borrow from himself rather than to teach, ex cathedrâ, the elements of his art in an elegant manner. Elegance, however, belonged not to Michel Angiolo, who assumed and took higher qualities: it did, however, to Raffaelle, who possessed, in a certain degree, many as high. Coreggio was elegance in itself; so was Canova. Phidias aimed higher, and, if we may judge from those works which bear his name, he assumed, he attempted, he reached beauty with grandeur, and could execute beauty with the milder radiance of elegance.

In architecture an edifice is said to be *elegant* when it avoids all that is superfluous, all which contributes only to magnificence and splendour, and which is executed after the most approved models, in the choicest style, and finished in the most exquisite manner; avoiding useless extravagance both in materials and workmanship, embellishing rather the humble than adding to the rich or extravagant. It is the Doric of art:—remote from poverty, and far from gaudy richness or extravagance of mere wealth. In point of fact, a boudoir or a cabinet should be *elegant*, an audience room or presence chamber of a sovereign *rich*, a senate house *grand*, and (perhaps) a banqueting house for a peculiarly magnificent occasion extravagant in expense, but not in taste.

Elegance consists in a good selection and tasteful arrangement of necessaries; demands rather more embellishment than mere want requires, and therefore is generally pleasing. Concominance will mostly produce elegance, but there must be a whole. This eminent quality of art requires a decided harmony; there must be no discords nor discrepance, no dingy gilding, but every part must accord. However plain, it must be neat in proportion, embellished with simplicity and taste, and yet useful. Elegance like taste can be better felt and understood than described. The *simplex munditiis* of Horace, the *gracilis te puer in rosa* of the same *elegant* poet explain the epithet to perfection.

Elegance may even exist with a species of negligence, if it be not accompanied with imperfection, but it does not appertain to the superior kind of beauty which belongs rather to majesty and magnificence. The beauty of the Venus Callipygos approaches the character of elegance more than that of the Apollo Belvedere or the Venus de Medici, which are majestic, grand, and far above the minuter beauties of that milder sort, which by convention we term elegant. The figures of Coreg-

gio are, in a similar degree, more elegant than those of Raffaelle, who is again in style more elegant than Michel Angiolo. According to Mengs this quality in art consists in a great variety of curved lines and angles; for the flexibility and undulation of an outline consists of such a variety; which description of variety mainly contributes to the elegance of Coreggio. Mengs was, however, a mechanical artist, and might define but could not imitate what Sterne happily calls the Coreggiosity of Coreggio.

ELEPHANT. [*elephantus*, Lat. Ἐλεφάντος, Gr.] *In the history and archaiology of the fine arts.* The largest of quadrupeds, of whose sagacity, fidelity, and intelligence, many surprising relations are given. His teeth furnish the finest ivory. These quadrupeds are not mentioned by the Greek historians as having been employed in their armies before the time of Alexander the Great, whose generals brought them into Europe. The Romans became acquainted with them for the first time in the year 472 A. U. C., in the armies of Pyrrhus, King of Epirus, who entered Italy in aid of the inhabitants of Tarentum. It being in Lucania that elephants were first seen by the Romans in the armies of Pyrrhus, occasioned them to be called by that people Lucanian oxen (bos Lucas). Seven years after this event the consuls Marcus Curius Dentatus, and Lucius Cornelius Lentulus, led the elephants of Pyrrhus in the triumph which followed the defeat of that prince and his allies. After this they were often used in their triumphal ceremonies. In the year 502 A. U. C. they were introduced into the public sports to combat each other, against other animals, and even against the gladiators. Suetonius and other writers relate, that in the reign of Nero an elephant, mounted by a horseman, descended from an elevated stage in the amphitheatre to the arena, and walked upon a rope.

The senate of Rome erected to the honour of Balbinus, Maximus, and Gordian, statues placed in triumphal chariots drawn each by four elephants. Cassiodorus speaks of bronze elephants in the Via Sacra, and Victor places, in the eighth region of the city, the statue of an elephant that was known by the name of the *elephas herbarius*, as being near to the forum olitorium, or vegetable market, which was cast by order of Augustus. At Constantinople there were formerly, near the *Porta Aurea*, some elephants of bronze, which were said to resemble those which Theodosius used in his triumphal entry, and which he took from the temple of Mars at Athens. In the hippodrome, according to Nicetas, was a fine elephant of bronze, which was afterwards taken away by the Romans. In the Forum of Constantine there was also an elephant of bronze, which was overthrown and destroyed by an earthquake.

The figure of this animal is often to be met with on Greek and Roman coins and medals. The ancient kings of Syria, who often used elephants, have also figured them upon their medals; sometimes alone, sometimes with a driver, and at other times attached to a chariot. Seleuchus I. who bred elephants with great care, was so much attached to them that he received therefrom the nickname of *Elephentarchus*, master of elephants. Antiochus I. represented elephants upon his medals in commemoration of the signal victory which he obtained, by means of his ten elephants, over the Galatians, who were very superior to him in the number of men. The elephant is also represented on medals struck at Apamia in Phrygia.

This quadruped, as the emblem of Africa, is found on medals of the Cæcilian family of Rome; and also on the reverse of a denarius of the Apronian family, as the symbol of the fifth legion, which was given them by Julius Cæsar for having beaten, in one of his engagements, the vanguard of the enemy, which was fortified by elephants. For this reason it is probable that Julius Cæsar also adopted the same figure on several of his medals, although Millin makes it a matter of question. According to Servius and Spartianus, it was because the grandfather of Cæsar killed in Africa an elephant, which is called in the Punic language *Cæsar*, and that he adopted it as a symbol in commemoration of that event. Titus Livius, however, makes mention of a prætor named Sextus Julius, surnamed Cæsar in the year of Rome 545, in the second Punic war, from whom as their ancestor Julius took his surname. Other writers think that this figure on the medals of Cæsar alludes to the combat of elephants which he gave to the people, in his dictatorship, after his victorious return from Spain, where he defeated Pompeius, son of Pompeius, in the year of Rome 710; while others, with more probability, think that the elephant on Cæsar's medals relates to his victory over Scipio and Juba in Africa: in memory of which event other of Cæsar's medals are inscribed with an elephant trampling on a dragon.

According to Aristotle the elephant was dedicated to the sun, and looked upon as

the longest liver of all animals. On account of this longevity this quadruped is used as an emblem of eternity upon medals of Philip, of Diocletian, and of Maximinus. Upon many medals of the Empresses of Rome the thensa or chariot of these princesses is represented as drawn by two or four elephants, and inscribed with the word ÆTERNITAS. The epigraph CONSECRATIO, which is found on many similar medals of different emperors, denotes that it is in memory of their consecration that the elephant is represented upon them.

In many instances similar medals were struck to record the memory of public games wherein combats of elephants were introduced. Of which many are found of Domitian, Antoninus Pius, Commodus, Septimius Severus, Heliogabalus, and of Gordian, and inscribed with the epigraph MUNIFICENTIA.

Upon several medals commemorative of the secular games, struck in the reign of Philip the elder, is an elephant rode by a driver. On medals of Augustus and Nero are bigæ of elephants placed on the summit of a triumphal arch. The skin of an elephant's head, worn as a casque by a female, serves for a symbol of Africa upon the medals of Alexandria in Egypt, and of Cyrene; of the Roman families of Cæcilia, Cestia, Eppia, Furnia, and Norbana; and of the emperors Augustus, Nero, Trajan, Hadrian, Septimius Severus, Diocletian, Maximinus, Galerius, and Maxentius. The heads of many Egyptian kings are also represented upon coins and medals, covered with a helmet in the shape of an elephant's head.

According to Beger, the elephant was also used by the ancients as the symbol of piety and reverence towards the gods, because they believed that he worshiped the sun. It was also particularly consecrated to Bacchus, and representations of elephants have been found on antique monuments containing Bacchanalian processions, in commemoration of that god's expedition to the Indies.

ELEPHANTA. [from *elephantus*, Lat.] *In the history of the arts.* A small island in the harbour of Bombay, in which is situated one of those curious and wonderful excavations which have preserved to our times specimens of the sculpture and architecture of the ancient Hindûs. This excavation, which is one of the most singular and interesting, is mentioned in the article ARCHITECTURE, as far as regards the style of that art therein preserved. See ARCHITECTURE. The following account of this extraordinary effort of art is principally taken from a Memoir by Mr. Goldingham, one of the honourable Company's astronomers at Fort St. George, who published his investigations in the fourth volume of the Asiatic Researches.

The *Elephanta Cave*, which is situated in a small island in the harbour of Bombay, has deservedly attracted the attention of the curious. An elephant of black stone, large as the life, is seen near the landing place, from which the island probably took its name: the cave is about three quarters of a mile from the beach; the path leading to it lies through a valley; the hills on either side beautifully clothed, and, except when interrupted by the dove calling to her absent mate, a solemn stillness prevails; the mind is fitted for contemplating the approaching scene.

The cave is formed in a hill of stone, its massy roof is supported by rows of columns regularly disposed, but of an order different from any in use with us; gigantic figures in relief are observed on the walls; these, as well as the columns, are shaped in the solid rock, and by artists, it would appear, possessed of some ability, unquestionably of astonishing perseverance. Several of the columns have been levelled and the figures mutilated, as Mr. Goldingham was informed, by the Portuguese, who were at the trouble (and no small one) of dragging cannon up the hill for the better execution of this exploit. Destructive superstition seeks not for merit; she commits to the flames and to destruction members of a community who are most valuable, and structures which do honour to human ability!

The wall at the upper end of the cave is crowded with sculpture; the attention is first arrested by a colossal bust, representing a being with three heads; the middle face is presented in full, and expresses a dignified composure; the head and neck are splendidly covered with ornaments. The face on the left is in profile, and the head dress rich; in one of the hands is a flower, and in the other a fruit resembling a pomegranate; a ring like that worn by the Hindûs at present is observed on one of the wrists; the expression of the countenance by no means unpleasant. The head on the right is different; the face is in profile, the forehead projects, the eyes stare; snakes supply the place of hair, and the representation of a human skull is conspicuous on the covering of the head; one hand grasps a monstrous *Cobro de Capella* (the hooded snake), the other a smaller; the whole

together is calculated to strike terror into the beholder. The height of this bust is about eighteen feet, and the breadth of the middle face about four.

Each side of this niche is supported by a gigantic figure leaning on a dwarf.

A niche of considerable dimensions and crowded with figures is formed on each side of the former; in the middle of the niche, on the right, stands a gigantic figure, apparently a female, but with only one breast. This figure has four arms, the foremost right hand is leaning on the head of a bull, the other grasps a *cobra de capella*, while a circular shield is observed in the inner left hand; the head is richly ornamented; on the right stands a male figure bearing a pronged instrument resembling a trident; on the left is a female holding a mace or sceptre; near the principal is a beautiful youth on an elephant; above this is a figure with four heads, supported by swans or geese; the opposite is another male figure with four arms, mounted on the shoulders of another, having a sceptre in one of the hands. At the top of the niche small figures are sculptured in different attitudes, seemingly supported by clouds.

The most conspicuous of the groups on the niche to the left is a male figure nearly seventeen feet in height, with four arms; on its left stands a female about fifteen feet high. The same circular rings worn by the present Hindû women are conspicuous on the legs and wrists of this figure; the hair bears a like correspondence in the mode of putting it up; the countenance is particularly soft, and expressive of gentleness. In the back ground a figure with four heads, supported by birds, and one with four arms on the shoulders of another are also observed. Several smaller figures in attendance: one with the right knee bent to the ground, in the attitude of addressing the principal, bears a crese exactly resembling that in present use. The heads of most of the small male figures have a whimsical appearance, being covered with an exact resemblance of modern wigs.

On each side of these groups is a small dark room, which was held sacred in ancient times perhaps from all but the unpolluted Brahmin; but bats, spiders, scorpions, and snakes are now in full and undisturbed possession. To the left of the last described group, and nearer the side of the cave, is another, in which a male is observed in the action of leading a female towards a majestic figure seated in the corner of the niche, his head covered like our judges on the bench; the countenance and attitude of the female highly expressive of modesty and a timid reluctance; a male behind urges her forward. Several smaller figures compose this group. It is curious to observe, that all the female figures have ornaments sculptured round their wrists and legs like those worn by the Hindû women at present, while the males, bearing the same correspondence, have ornaments round the wrists only.

Opposite the last niche, and fifty feet nearer to the entrance, is another of equal dimensions, enclosing a figure that forcibly arrests the attention; it is a gigantic half-length of a male with eight arms; round one of the left arms a belt, composed of human heads, is seen; a right hand grasps a sword uplifted to sever a figure, seemingly kneeling (but too much mutilated to distinguish it properly) on a block, held in the corresponding left hand; a *cobra de capella* rises under one arm; among the singular decorations of the head a human skull is observed; above are several small figures represented in distress and pain. Many of the figures are mutilated, as is the principal, whose aspect possesses a great degree of unrelenting fierceness.

Crossing to the other side of the cave near to one of the small rooms beforementioned is a male, sitting as the people of that country do at present; a female in the same posture on his left, with an attendant on either side; at the feet of the male is a figure of a bull couchant; and in each corner of the niche stands a gigantic guard. Opposite is a correspondent niche: the figures being considerably mutilated, and the situation dark, prevent these being properly discriminated; a sitting male figure, having an attendant on either hand is, however, easily perceived.

A niche filled with figures greatly defaced is observed on each side the entrance. On one side is a male that had eight arms, which are all destroyed: in the back part is a figure with four arms, supported by birds; and the other figure with four heads, whimsically elevated. A large sitting figure is the principal in the opposite niche; a horse and rider in the back ground; the former caparisoned according to the present mode of that country.

On the left side, and half way up the cave is an apartment about thirty feet square, enclosing the *Lingam*: an entrance on the four sides, and each side of either entrance is supported by a figure seventeen feet in height, each figure ornamented differently.

The part of this surprising monument

of human skill and perseverance hitherto described is generally called *the great cave;* its length is one hundred and thirty-five feet, and breadth nearly the same. There are compartments on both sides, separated from the great cave by large fragments of rock and loose earth, heretofore probably a part of the roof. That on the right is spacious, and contains several pieces of sculpture: the most remarkable is a large figure, the body human, but the head that of an elephant. The lingam is also enclosed here. Above each, of a line of figures standing in a dark situation, is a piece of sculpture that was pointed out to Mr. Goldingham as an inscription: however (with the assistance of a torch), he found one an exact copy of the other, in different dialects, and with little resemblance of characters.

The compartment on the other side contains several sculptures, and among the rest, a figure with an elephant's head and human body. A deep cavity in the rock hereabout contains excellent water, which, being sheltered from the influence of the sun, is always cool, and deservedly held in estimation by those whom curiosity leads to the cave, through a scorching atmosphere. A traditional account of the extent of this cavity, and the communication of its waters by subterraneous passages, with others very distant, was given him by a native of the island; which would make a considerable figure in the hands of a poet.

Gigantic as the figures are, the mind is not disagreeably moved on viewing them, a certain indication of the harmony of proportions. Having measured three or four, and examined their proportions by the scale allowed to be the most correct, he found many of them stood even that test, while the disagreements were not equal to what are met with every day in people whom we think by no means ill proportioned.

The island wherein these curious remains of antiquity are situated is about five miles and a half from Bombay, in an easterly direction; its circumference cannot be more than five miles: a neat village near the landing place contains all its inhabitants, whom, inclusive of women and children, number about one hundred. Their ancestors, they tell you, having been improperly treated by the Portuguese, fled from the opposite island of Salsette hither, cultivating rice and rearing goats for their support. In the same humble road do they continue. The islanders have no boat; they cut wood from the adjoining hills, which the purchasers remove in boats of their own; they are under the protection of the India Company, and pay about fifty-six pounds annually to the government; the surplus revenue furnishes their simple clothing. By persevering in this humble path these harmless people continue to rejoice in tranquillity under their banyan tree. The cave, they tell you, was formed by the gods: and this is all they pretend to know of the matter.

Various have been and are to this day the conjectures respecting the *Elephanta Cave.* Those who attempt to deduce its origin from the Egyptians, from the Jews, or from Alexander the Great, appear to give themselves much unnecessary trouble; which shall be shown as briefly as the subject will admit of, though at the same time it must be observed, that resembling features are not wanting in the case of the Egyptians and of the Jews to lead towards such deductions; but these resemblances struck Mr. Goldingham as tending to the elucidation of a more interesting hypothesis, viz. that the systems of those people were copies of an original, found in that part of the world.

The striking resemblance in several particulars of the figures in the cave to the present Hindû race would induce those who from history, as well as from observation, have reason to believe they have preserved the same customs from time immemorial, to imagine that the ancestors of these people were its fabricators; but those who are in a small degree acquainted with their *mythology* will be persuaded of it; nor is a much greater extent of knowledge requisite to enable us to discover it to be a temple dedicated principally to Siva, the *destroyer* or *changer.*

The *bust* is doubtless a personification of the three grand Hindû attributes of that being for whom the ancient Hindûs entertained the most profound veneration, and of whom they had the most sublime conceptions. The middle head represents *Brahma,* or the creative attribute; that on the left *Vishnu,* or the preserving; and the head on the right *Siva,* or the destructive or changing attribute.

The figure with *one breast* has been thought by most to represent an *Amazon;* but it is more likely a representation of the *consort of Siva,* exhibiting the active power of her lord; not only as *Bawani* or courage, but as *Isani,* or the goddess of Nature, considered as male and female, and presiding over generation, and also as *Durga.* Here we find the bull of *Iswara* (one of *Siva's* names), and the figure bear-

ing his trisule or trident. The beautiful figure on the elephant Mr. Goldingham conceived to be *Cama*, or the Hindû god of Love; the figure with *four heads*, supported by *birds*, is a representation of *Brahma;* and that with *four arms*, mounted on the shoulders of another, is *Vishnu's*.

The two principal figures in the niche to the left appear to represent *Siva* and his goddess as *Parvata*. Here, as before, we observe *Brahma* and *Vishnu* in the *back ground*.

The terrific figure with eight arms has been much talked of; some will have it to represent *Solomon* threatening to divide the harlot's child; others, with more reason on their side, suppose it to represent the tyrant *Causa* attempting the life of the infant god *Crishna*, when fostered by the herdsman *Ananda*. To Mr. G. the third attribute, or the *destroyer in action*, appeared too well represented to be mistaken. The distant scene, where the smaller figures appear in distress and pain, is perhaps the infernal regions. The figure about to be destroyed does not seem to be an infant, but a full grown person; if, indeed, the destroyer was of the human size, the figure in question would bear the proper proportion as an infant; but as he is of enormous magnitude, a human being, full grown, would appear but an infant by the side of him; and thus it is that people have been deceived: a case by no means uncommon in circumstances like the present.

The sitting male and female figures having a bull couching at the feet of the former are *Siva* and his goddess; and thus are they represented in the pagoda of the present day.

No person can mistake the figure with the human body and elephant's head for any other than *Ganesa*, the Hindû god of Wisdom, and the first born of *Siva;* and thus is he represented at present.

From what has been advanced, it will appear incontestable that this is a *Hindû temple;* whence the lingam is a testimony sufficient of *Siva's* having presided there, without the other evidences which the intelligent in the Hindû mythology will have discovered in the course of this account.

To deduce the era of the fabrication of this structure is not so easy a task; but it was, no doubt, posterior to the great schism in the Hindû religion, which, according to the *Puranas*, happened at a period coeval with our date of the creation. Be this as it may, we have accounts of powerful princes who ruled this part of the country of the later date, particularly of one who usurped the government in the ninetieth year of the Christian era, famed for a passion for architecture. Many worse hypotheses have been, than one which might be formed of his having founded the cave; but Mr. Goldingham was led to imagine, that no certain conclusions on this dark subject could be drawn from the sources of information open at present. See Sir William Jones's Treatise on the Gods of India, published in his Discourses edited by James Elmes, M. R. I. A. 2 vols. 12mo. London, 1821.

Elevation. [*elevatio*, Lat.] *In architecture.* The height of a building above the ground. The word *elevation* technically means the geometrical representation of an edifice measured vertically to the horizon, without regard to projections. It is the same as the ancient architects called *orthographia*, and our old writers, like Moxon, orthography, but which is now more correctly termed geometrical elevation. The graphic parts of an architectural design are the plans, geometrical elevations, sections, details at large, and perspective views.

Eleusinian. [*eleusinia*, Lat. from eleusis.] *In archaiology.* Sacred rites and ceremonies performed by the ancient Greeks at Eleusis, in honour of Ceres, with lighted torches and in secret. They were not to be spoken of under pain of death.

Eleusis. [Lat. Ἐλευσὶς, Gr.] *In the history of ancient architecture.* A town of Attica that was next in rank to Athens. The road that connected these two cities was dignified by the title of the sacred way; and was nearly four leagues in length. The temple of Ceres and Proserpine stood on a hill above the town; it was built in the time of Pericles of Pentelican marble, and no cost was spared to increase its magnificence. Its length was three hundred and eighty four feet, by three hundred and twenty-five feet. In this temple the famous Eleusinian mysteries were celebrated. Eleusis is now a miserable village of about thirty mud houses. There was also a temple of Diana, called from its situation, Diana Propylea.

In 1812 Eleusis was visited by a mission from the Dilettanti Society of London, consisting of Sir William Gell, a member of that society, and well known by his works upon the Troad, Ithaca, Argolis, and Pompeii, assisted by two architects, Messrs. J. P. Gandy and F. Bedford. These gentlemen sailed towards the end of the year 1811, and at the beginning of 1812 arrived at Zante, from whence they

repaired to Athens, and being there detained by the difficulty of procuring a safe passage to Smyrna, employed themselves in excavations at Eleusis, where the temples, although of so high importance, had never yet been examined, from the depth of soil under which their ruins were buried. The result of their labours was the discovery of the great mystic temple of Ceres, consisting of a *cella*, about one hundred and eighty feet square, with a portico of twelve magnificent Doric columns of white marble, more than six feet in diameter.

The approach to this temple by "the sacred way" from Athens, was over an extensive pavement, supposed by the travellers to be the area of Triptolemus, on the right hand of which was discovered a most beautiful small Doric temple *in antis*, probably that of Diana Propylæa. The Propylæum itself was exactly similar to that of the Acropolis of Athens, already published by Stuart. Within this was a second portal of the Corinthian order, which opened immediately into the peribolus of the great temple.

The society have published one volume of these elaborate and accurate researches, which is surpassed by no architectural publication extant, and is equalled only by the second volume of the Antiquities of Athens, which derives no inconsiderable portion of its interest from the contributions of this patriotic society. It is called "The unedited ANTIQUITIES OF ATTICA, comprising the architectural remains of Eleusis, Rhamsius, Sunium, and Thoricus: by the SOCIETY OF DILETTANTI, imperial folio, 78 fine plates by the best engravers, from the drawings of JOHN PETER GANDY, and FRANCIS BEDFORD.

These drawings, as far as concerns Eleusis, were a general plan of the buildings in and about Eleusis. Plan, elevations, section, and details at large and figured of the temple of Diana Propylæa. Similar drawings and details of the temple of Ceres; and of the Propylæa, with all the orders, panellings of the marble cieling, lacunaria, &c. Order of the Corinthian pilasters and all the details. A map of the city of Eleusis, church of Agios Zaccharias, a tomb on "the sacred way," view of the rock of the Panagia, view of Eleusis from the Mole, another view from the east, Athens and Eleusis from the top of Corydallus. A complete catalogue of all the drawings, maps, &c. made in this interesting mission is printed in the third volume of the ANNALS OF THE FINE ARTS, p. 478, by the author of this Dictionary; who gives the preceding statement of a portion of the labours of this excellent society with the greatest satisfaction. It is really surprising to witness the energy of all classes of the British people at this important period in cultivating and extending the arts of peace and of civilization. Almost all our great discoveries and important works are made by individuals or private societies of individuals; and while the late government of France gave to the world their noble and splendid work on Egypt, Lord Elgin is unable to publish his magnificent collection of architectural drawings; and the Ionian Committee of the Dilettanti Society are apprehensive (see their report of 1817), that unless they have pecuniary assistance either by the subscription of the members of the society, or by other means, the results of their useful labours cannot be all accomplished. They are really more entitled to a parliamentary grant to continue their objects than any other society in England after the British Museum.

ELGIN MARBLES. *In the archaiology of architecture and sculpture.* A series of ancient sculptured marbles, named after Thomas EARL OF ELGIN, by whom they were rescued from the barbarous hands of the Turks, brought to England, and finally sold to the British government, who have deposited them in the British Museum for the use of the public.

These miracles of ancient art belonged originally to the temple of Minerva Parthenon, and to some other edifices on the Acropolis at Athens. Their ancient history is well known; they were imagined and directed by Phidias, and executed in part by his chisel, were for more than seven hundred years the admiration of the ancient world; and have been regarded by all competent judges as inimitable for their perfection in art. During the period of Lord Elgin's embassy to the Porte, some eminent artists in England recommended the object of this collection as one of the highest importance to the fine arts. It was proposed as such to the English government, who declined the undertaking, which appearing of doubtful issue, his lordship engaged in the pursuit entirely at his own risk and expense.

Lord Elgin, in pursuit of this patriotic scheme, took six of the first artists from Rome, and employed them several years upon the undertaking, and continued his establishment at Athens for sixteen years, and succeeded, by unconquerable exertion and perseverance, in achieving what powerful and favoured sovereigns had, in suc-

cessive ages, attempted in vain; what Canova would have been contented to have come to London alone to have seen*.

It is to be considered among the difficulties of Lord Elgin's undertaking that he had to remove the enormous and ponderous pieces of marble a distance of nearly five miles from Athens to Peiræeus, the port of maritime Athens, in a country without roads, without machinery, and without any other resources than manual exertion. He had to convey them to England, to bring them from the out ports to London, and to keep them there at a considerable expense. His lordship had also the misfortune to lose a valuable vessel of his own employed in the service, that was wrecked off Cerigo, while having on board a number of these marbles, which he afterwards recovered with infinite labour, great perseverance, and cost. Besides these, it is well known that no operations can be conducted in Turkey without the distribution of presents; which are always proportioned to the rank of the parties, and the eagerness or difficulty of the pursuit. And that, while Lord Elgin negotiated as ambassador with the officers of the empire at Constantinople (the city of Athens being the jointure of the Sultan's mother), his artists had to purchase the good will of the persons in authority on the spot, on every occurrence, wherever any assistance was required.

In a memoir upon these marbles written by that eminent archaiologist and critic the chevalier E. Q. Visconti, and read at a public meeting of the two classes of the Royal Institute of France in the year 1815, he admits that the most celebrated collections of Europe contain scarcely any of those monuments of sculpture, of which the classic authors have given us an account as being in general estimation among the ancients. He excepts the Laocoön and a few conjectural copies of a small number of masterpieces of the great sculptors; the hope of seeing the originals of which appeared to be lost for ever. "But in viewing," continues he, "the marbles which the Earl of Elgin has removed from Athens to London, the connoisseur is perfectly certain that he is contemplating a variety of those valuable works which, in the time of Plutarch (Plut. Periel. § 13), that is, in the age of Trajan, were regarded as inimitable for their grace and beauty." And all agree that they present an indisputable standard of perfection in art, and are an invaluable acquisition to our rising school of art.

These celebrated relics of the most glorious days of ancient art consisted, when Lord Elgin first brought them to England, of

1. Several of the matchless statues which adorned the pediments of the temple of Minerva Parthenon at Athens.

2. A number of the metopes from the same temple.

3. The whole remaining frieze of the temple, of which about two hundred and fifty feet is original, in marble: the remainder is in casts executed on the spot.

4. Casts, also executed on the spot, of all the sculpture of the Theseium, or temple of Theseus.

5. A great variety of fragments of valuable sculpture from Athens, various in their subject and execution.

6. A complete series of architectural drawings, containing the most accurate details of every building that can still be traced in Athens, or in the Peloponnesus, and restorations of the most conspicuous edifices executed on the spot, in a style of the highest professional excellence†.

7. Specimens of the most admired characteristics and embellishments of architecture, such as columns, capitals, friezes, &c. &c.; many of these originals, others taken from the buildings.

8. A very precious and numerous series of inscriptions, comprehending many of considerable value to history, to literature, and to the arts. The Boustrophedon of Cape Sigæeum is among the number of these invaluable and authentic documents.

9. A number of vases procured by excavations in the neighbourhood of Athens.

10. And a collection of medals containing some of great merit and interest.

The beforementioned drawings, numbered 6, the vases, and medals, were not included in the purchase by government.

The importance of these extraordinary works to the arts of this country merits, in a dictionary of the fine arts, the fullest investigation; their history is therefore

* See Canova's letter to Lord Elgin of the 10th November, 1815, often reprinted; and which has already produced the most beneficial effects upon the fine arts of the country.

† This is the collection alluded to near the close of the preceding article, and of which Mr. Wilkins, in his Atheniensia, says he "has been informed that Lord Elgin's intention of publishing a complete and splendid work from the drawings made on the spot has been abandoned, in consequence of the estimated expense of the undertaking, and the little probability that such a work would be in sufficient demand to defray the necessary expenses of publication." Surely the government who purchased such a bargain should gratify the public and serve our artists, by undertaking the publication itself, through the medium of the British Museum.

traced from the time that Lord Elgin first indulged the idea of bringing them to his native country, and as his lordship gave his authority to a most interesting little work, written by his then secretary, W. Hamilton, Esq. entitled a "Memorandum on the subject of the Earl of Elgin's pursuits in Greece." The following account, which is decidedly the best, is extracted from it.

In the year 1799, when Lord Elgin was appointed his majesty's ambassador extraordinary to the Ottoman Porte, he was in habits of frequent intercourse with Mr. Harrison, an architect of great eminence in the west of England, whom his lordship consulted on the benefits that might possibly be derived to the arts in this country, in case an opportunity could be found for studying minutely the architecture and sculpture of Ancient Greece; whose opinion was, that although we might possess exact admeasurement of the public buildings in Athens, yet a young artist could never form to himself an adequate conception of their minute details, combinations, and general effects, without having before him some such sensible representation of them as might be conveyed by casts.

On this suggestion Lord Elgin proposed to his majesty's government, that they should send out English artists of known eminence, capable of collecting this information in the most perfect manner; but the prospect appeared of too doubtful an issue for ministers to engage in the expense attending it. Lord Elgin then endeavoured to engage some of these artists at his own charge; but the value of their time was far beyond his means. When, however, he reached Sicily, on the recommendation of Sir William Hamilton, he was so fortunate as to prevail on Don Tita Lusieri, one of the best general painters in Europe, of great knowledge in the arts, and of infinite taste, to undertake the execution of this plan; and Mr. Hamilton, who was then accompanying Lord Elgin to Constantinople, immediately went with Signor Lusieri to Rome, where, in consequence of the disturbed state of Italy, they were enabled to engage two of the most eminent *formatori* or moulders, to make the *madreformi* for the casts; Signor Balestra, a distinguished architect there, along with Ittar, a young man of promising talents, to undertake the architectural part of the plan; and one Theodore, a Calmouk, who, during several years at Rome, had shown himself equal to the first masters in the design of the human figure.

After much difficulty Lord Elgin obtained permission from the Turkish government to establish these six artists at Athens; where they systematically prosecuted the business of their several departments during three years, under the general superintendance of Signor Lusieri.

Accordingly every monument, of which there are any remains in Athens, has been thus most carefully and minutely measured, and, from the rough draughts of the architects (all of which are preserved), finished drawings have been made by them of the plans, elevations, and details of the most remarkable objects; in which the Calmouk has restored and inserted all the sculpture with exquisite taste and ability. He has besides made accurate drawings of all the bassi relievi on the several temples, in the precise state of decay and mutilation in which they at present exist.

Most of the bassi rilievi and nearly all the characteristic features of architecture in the various monuments at Athens have been moulded, and the moulds of them brought to London.

Besides the architecture and sculpture at Athens, all similar remains which could be traced through several parts of Greece have been measured and delineated, with the most scrupulous exactness, by the second architect Ittar.

In the prosecution of this undertaking the artists had the mortification of witnessing the very *wilful devastation to which all the sculpture, and even the architecture, were daily exposed on the part of the Turks and travellers:* the former equally influenced by mischief and by avarice, the latter from an anxiety to become possessed, each according to his means, of some relic, however small, of buildings or statues which had formed the pride of Greece. The Ionic temple on the Ilyssus which, in Stuart's time (about the year 1759), was in tolerable preservation, had so entirely disappeared, that its foundation was no longer to be ascertained. Another temple near Olympia had shared a similar fate within the recollection of many. The temple of Minerva had been converted into a powder magazine, and was in great part shattered from a shell falling upon it during the bombardment of Athens by the Venetians, towards the end of the seventeenth century; and even this accident has not deterred the Turks from applying the beautiful temple of Neptune and Erectheus to the same use, whereby it is still constantly exposed to a similar fate. Many of the statues over the entrance of the temple of Minerva, which had been thrown down by the explosion, had been powdered

into mortar, because they offered the whitest marble within reach; and parts of the modern fortification, and the miserable houses where this mortar had been so applied, are easily traced. In addition to these causes of degradation, the Turks will frequently climb up the ruined walls and amuse themselves in defacing any sculpture they can reach; or in breaking columns, statues, or other remains of antiquity, in the fond expectation of finding within them some hidden treasures.

Under these circumstances Lord Elgin felt himself irresistibly impelled to endeavour to preserve, by removal from Athens, any specimens of sculpture he could, without injury, rescue from such impending ruin. He had, besides, another inducement, and an example before him, in the conduct of the last French embassy sent to Turkey before the Revolution. French artists did then attempt to remove several of the sculptured ornaments from several edifices in the Acropolis, and particularly from the Parthenon. In lowering one of the metopes the tackle failed, and it was dashed to pieces; one other object was conveyed to France, where it is held in the highest estimation, and where it occupies a conspicuous place in the gallery of the Louvre, and constituted national property during the French Revolution. The same agents were remaining at Athens during Lord Elgin's embassy, waiting only the return of French influence at the Porte to renew their operations. Actuated by these inducements Lord Elgin made every exertion; and the sacrifices he has made have been attended with such entire success, that he has brought to England, from the ruined temples at Athens, from the modern walls and fortifications, in which many fragments had been used as blocks for building, and from excavations from amongst the ruins, made on purpose, such a mass of Athenian sculpture, in statues, alti and bassi rilievi, capitals, cornices, friezes, and columns as, with the aid of a few of the casts, to present all the sculpture and architecture of any value to the artist or man of taste which can be traced at Athens.

In proportion as Lord Elgin's plan advanced, and the means accumulated in his hands towards affording an accurate knowledge of the works of architecture and sculpture in Athens and in Greece, it became a subject of anxious inquiry with him, in what way the greatest degree of benefit could be derived to the arts from what he had been so fortunate as to procure.

In regard to the works of the architects employed by him, he had naturally, from the beginning, looked forward to their being engraved; and accordingly all such plans, elevations, and details as to those persons appeared desirable for that object, were by them, and on the spot, extended with the greatest possible care for the purpose of publication. Besides these, all the working sketches and measurements offer ample materials for further drawings, should they be required. It was Lord Elgin's wish that the whole of the drawings might be executed in the highest perfection of the art of engraving; and for this purpose a fund should be raised by subscription, exhibition, or otherwise; by aid of which these engravings might still be distributable, for the benefit of artists, at a rate of expense within the means of professional men.

Great difficulty occurred in forming a plan for deriving the utmost advantage from the marbles and casts. Lord Elgin's first attempt was to have the statues and bassi rilievi restored; and in that view he went to Rome to consult and to employ Canova. The decision of that most eminent artist was conclusive. On examining the specimens produced to him, and making himself acquainted with the whole collection, and particularly with what came from the Parthenon, by means of the persons who had been carrying on Lord Elgin's operations at Athens, and who had returned with him to Rome, Canova declared, "That however greatly it was to be lamented that these statues should have suffered so much from time and barbarism, yet it was undeniable, that they never had been retouched; that they were the work of the ablest artists the world had ever seen; executed under the most enlightened patron of the arts, and at a period when genius enjoyed the most liberal encouragement, and had attained the highest degree of perfection; and that they had been found worthy of forming the decoration of the most admired edifice ever erected in Greece. That he should have had the greatest delight, and derived the greatest benefit from the opportunity Lord Elgin offered him of having in his possession and contemplating these inestimable marbles. But" (*his expression was*) "it would be sacrilege in him or any man to presume to touch them with his chisel." Since their arrival in this country they have been laid open to the inspection of the public; and the opinions and impressions, not only of artists, but of men of taste in general, have thus been formed

and collected. From these the judgment pronounced by Canova has been universally sanctioned: and all idea of restoring the marbles deprecated. Meanwhile the most distinguished painters and sculptors have assiduously attended the museum, and evinced the most enthusiastic admiration of the perfection to which these marbles now prove to them that Phidias had brought the art of sculpture, and which had hitherto only been known through the medium of ancient authors. They have attentively examined them, and they have ascertained that they were executed with the most scrupulous anatomical truth, not only in the human figure, but in the various animals to be found in this collection. They have been struck with the wonderful accuracy, and, at the same time, the great effect of minute detail; and with the life and expression so distinctly produced in every variety of attitude and action. Those more advanced in years have testified the liveliest concern at not having had the advantage of studying these models: and many who have had the opportunity of forming a comparison (among these are the most eminent sculptors and painters in this metropolis), have publicly and unequivocally declared, that in the view of professional men, this collection is far more valuable than any other collection in existence.

With such advantages as the possession of these unrivaled works of art afford, and with an enlightened and encouraging protection bestowed on genius and the arts, it may not be too sanguine to indulge a hope that, prodigal as nature is in the perfections of the human figure in this country, animating as are the instances of patriotism, heroic actions and private virtues deserving commemoration, sculpture may soon be raised in England to rival these, the ablest productions of the best times of Greece. The reader is referred to the synopsis of the British Museum, and to the Chevalier Visconti's Memoirs, before quoted, for complete and authentic catalogues of these marbles, but the following brief abstract is necessary to give a view of what they consist to readers who may reside at a distance from the metropolis, or have not those works at hand. In that part of the collection which came from the eastern pediment of the Parthenon are several statues and fragments, consisting of two horses' heads in one block, and the head of one of the horses of night, a statue of Hercules or Theseus, a group of two female figures, a female figure in quick motion, supposed to be Iris, and a group of two goddesses, represented one sitting and the other half reclining on a rock. Among the statues and fragments from the western pediment are part of the chest and shoulders of the colossal figure in the centre, supposed to be Neptune, a fragment of the colossal figure of Minerva, a fragment of a head, supposed to belong to the preceding, a fragment of a statue of Victory, and a statue of a river god called Ilissus, and several fragments of statues from the pediments, the names or places of which are not positively ascertained, among which is one supposed to have been Latona, holding Apollo and Diana in her arms; another of the neck and arms of a figure rising out of the sea, called Hyperion, or the rising Sun; a torso of a male figure with drapery thrown over one shoulder. The metopes represent the battles between the Centaurs and Lapithæ, at the nuptials of Pirithous. Each metope contains two figures, grouped in various attitudes; sometimes the Lapithæ, sometimes the Centaurs victorious. The figure of one of the Lapithæ, who is lying dead and trampled on by a Centaur, is one of the finest productions of the art, as well as the group adjoining to it of Hippodamia, the bride, carried off by the Centaur Eurytion; the furious style of whose galloping in order to secure his prize, and his shrinking from the spear that has been hurled after him, are expressed with prodigious animation. They are all in such high relief as to seem groups of statues; and they are in general finished with as much attention behind as before. They were originally continued round the entablature of the Parthenon, and formed ninety-two groups. The frieze which was carried along the outer walls of the cell offered a continuation of sculptures in low relief, and of the most exquisite beauty. It represented the whole of the solemn procession to the temple of Minerva during the Panathenaic festival; many of the figures are on horseback, others are about to mount, some are in chariots, others on foot, oxen and other victims are led to sacrifice, the nymphs called Canephoræ, Skiophoræ, &c. are carrying the sacred offering in baskets and vases; there are priests, magistrates, warriors, deities, &c. &c. forming altogether a series of most interesting figures in great variety of costume, armour, and attitude.

From the Opisthodomus of the Parthenon Lord Elgin also procured some valuable inscriptions, written in the manner called Kionedon or columnar. The subjects of these monuments are public de-

crees of the people, accounts of the riches contained in the treasury, and delivered by the administrators to their successors in office, enumerations of the statues, the silver, gold, and precious stones deposited in the temple, estimates for public works, &c. (see ATHENS, PARTHENON, THESEIUM, &c.); and for books the student is referred to *A Letter from the Chevalier* ANTONIO CANOVA; *and two Memoirs read to the Royal Institute of France, on the Sculptures in the Collection of the Earl of Elgin, by the Chevalier* E. Q. VISCONTI, *member of the class of the fine arts, and of the class of history and ancient literature, author of the Iconographie Grecque, and of the Museo Pio Clementino*, translated from the French and Italian, 8vo. London, 1816. MEMORANDUM *on the subject of the* EARL OF ELGIN'S *Pursuits in Greece*, second edition, 8vo. London, 1815. ATHENIENSIA; or, *Remarks on the Topography and Buildings of* ATHENS, by WILLIAM WILKINS, A.M. F.R.S. late fellow of Gonvil and Caius College, Cambridge, 8vo. London, 1816. ANNALS OF THE FINE ARTS, vols. 1 and 3, for Report of the Select Committee of the House of Commons, &c. 5 vols. 8vo. London, 1820, &c. CHOISEUL GOUFFIER, *Voyage Pittoresque de la Grèce*, 2 tom. fol. Paris, 1782, 1809. *The Topography of Athens, by Colonel* LEAKE.

ELLORA. [from ELLOO *rajah*, who is said to have built it.] *In ancient architecture and sculpture.* An ancient Hindû town, called also Elloor and Verrool, situate in a fine valley near to Dowlatabad or Deoghire, a strongly fortified place in the Deccan of Hindûstan, fifteen miles from Aurungabad, the capital of the province of Dowlatabad or Amednagure; where, in the ranges of mountains that surround it, is a series of excavated pagodas, most of which are cut out of the solid rock. For the space of nearly two leagues together there is little else to be seen than pagodas of this nature, in which there are thousands of figures, appearing, from the style of their sculpture, to have been of ancient Hindû origin. M. Thevenot, who first gave any description of them (Voyages, part. iii. chap. 44), asserts his belief of their great antiquity and Hindû origin.

The excavated pagodas or sculptured caverns of Ellora are among the most astonishing works of art performed by any ancient people for size, number, curiosity, and skill. They were visited in 1794 by SIR CHARLES WARE MALET, Bart, who published a detailed account of the chief of them in the sixth volume of the Asiatic Researches. The plan and measurements were taken by Lieutenant JAMES MANLEY, the drawings by a very ingenious native in the baronet's service, named GUNGARAM, and he was farther assisted by the masterly talents of Mr. WALES, an able artist, who was at that time in India. This faithful and very detailed account has been used by subsequent travellers, and the plates copied even with their faults by a recent traveller without any acknowledgment.

Sir Charles Malet's inquiries as to the origin and date of these wondrous works were not so satisfactory in their results as he wished and expected. He also doubted not but that they were the works of a people whose religion and mythology were purely Hindû, and most of the excavations carry strong marks of dedication to MAHDEW or MAHADEO, as the presiding deity. The fanciful analogies of some travellers, particularly that which attributed to the eight handed figure of *Veer Buddur*, holding up the Rajah *Dutz* in one hand, and a drawn sword in another, with the famous judgment of Solomon, must vanish, and we must seek no longer for colonies of Jews, Egyptians, Ethiopians, or Phœnicians to supersede the more rational mode of accounting for such works in the enthusiastic labour and ingenuity of the natives of the country; by which means the wonder is at least simplified, which is no trifling point gained to minds in search of and in love with truth. The difference of the inscriptions in some of the caves, as observed by Sir Charles Malet, from the present known characters of Hindûstan, may be objected to their being the production of Hindû artists; but it is well known that the formation of letters undergoes great changes in the course of ages, and that such may be the case with respect to the excavations on that side of India may be fairly inferred, as the baronet forcibly observes, from the difficulty with which Mr. Charles Wilkins, a most learned man in Hindûstanee literature and antiquities, traced and recovered some inscriptions in the neighbourhood of Ghya.

Though Sir Charles Malet was fully persuaded that the generality of the excavations which he had seen, not only at *Ellora*, but elsewhere, were dedicated to MAHDEW or MAHADEO; yet he did not mean to abandon an idea, that the most northerly caves of *Ellora*, occupied by the naked, sitting, and standing figures, are the works of the *Sewras* or *Juttees*, who, by the *Brahmins*, are esteemed schismatics, and whose sect, called *Srawuk*, is very numerous in Guzerat.

On the antiquity of these astonishing works Sir Charles gives two different accounts of two intelligent men, one a *Mahomedan*, and the other a *Hindû*. The first, named MEER ALA KHAN, an inhabitant of Ahmednagure, who said he had received it from a person of acknowledged erudition. The second, a *Brahmin*, inhabitant of Roza, quoted a book, the authenticity of which Sir Charles could not discover, entitled *Sewa Lye Mahat*, or the grandeur of the mansion of SEWA, that is MAHDEW.

The *Mohamedan's* account was, that the town of *Ellora* was built by the Rajah EEL, who also excavated the temples, and being pleased with them, formed the fortress of Deoghire (Dowlatabad), which is a curious compound of excavation, scarping, and building, by which the mountains were converted into a fort, resembling the insulated temple in the area of the INDUR *Subba*, in the mountains of Ellora. Eel Rajah, he said, was contemporaneous with SHAH MOMIM ARIF, who lived above nine hundred years ago.

The *Brahmin*, on the other hand, informed Sir Charles that the excavated temples of *Ellora* were then (1794) 7894 years old, formed by ELLOO *rajah*, the son of Peshpont of Elichpore, when 3000 years of the *Dwarpa Yoag* were unaccomplished, which, added to 4984 of the present *Kal Yoag*, made 7984. The Rajah was afflicted with a sore disease, from which he was cured by the waters of Ellora, so that, looking upon the place as holy, he excavated and formed these wonderful pagodas.

This wide difference in the era between the Mohamedan and the Hindû is extraordinary, particularly when we reflect that they both agree in the person of EEL, or ELLOO *rajah* as the author of these excavations, who being identified as living in the same age with a well known character, throws the weight of probability into the Mohamedan's scale; and Sir Charles Malet very correctly observes, it must be remarked, that however fond the writers of that faith may be of the marvellous, in points of preternatural agency, according to their own system; yet, as annalists, they seem more entitled to credit than the Hindûs, whose historical and theological chronology is greatly mixed with and obscured by fable. "Whether we consider," says Sir Charles, "the design, or contemplate the execution of those extraordinary works, we are lost in wonder at the idea of forming a vast mountain into almost eternal mansions. The mythological symbols and figures throughout the whole leave no room to doubt of their owing their existence to religious zeal, the most powerful and most universal agitator of the human mind."

The following brief descriptions of these most extraordinary efforts of human skill are abridged from the accurate accounts of the abovenamed gentlemen, who so minutely examined and detailed the principal of them. They commence from the northernmost excavations, and are continued in the order in which they are situated in a mountain, which runs in a small degree of circular direction from N. 25. W. to S. 25 E.

The *first* cavern in this rotation is called JUGNATH SUBBA, and fronts s. 15 E. and is a fine excavation that faces the entrance of the area, having, on the left side *Adnaut Subba*, and on the right some other small excavations almost choked up, as is also the lower story of this. The ascent to the upper story is by a flight of steps, in the right corner of the excavation, which is in very fine preservation, many parts of the ceiling, pillars, &c. having the coats of lime with which the marks of the chisel have been concealed, and which has been curiously painted, still adhering to the stone. Opposite to the front of the cave is a large figure sitting crosslegged, with his hands in his lap one over the other, which the *Brahmin* who attended Sir Charles called JUGNATH; his two attendants he called JAY and BIDJEE*. On each side of the entrance of the recess are two standing figures, whom he called SUD and BUD. The whole room, except the open front, has the same figures as that in the recess, but of a smaller size. They all appear to be naked, and to have no other covering on the head than curled hair. The *Brahmin* who shows the caves has a legend that they were fabricated by BISKURMA†, the carpenter of RAMCHUNDER, who caused a night of six months, in which he was to connect these excavations with the extraordinary hill and fort of *Doulatabad* or Deoghire, about four coss distant; but that the cock crowing, his work was left unfinished, and the divine artist took the *Outar* of BODE. On the left hand side of this fine cave there is a coarse niche that opens into the *Adnaut Subba* below. This cave consists of two oblong squares, the inner one being formed by twelve pillars, the four at each end differing from those in the centre.

* In the Hindu mythology JAY and BIDJEE, or WIJEE, are the porters or doorkeepers of VISHNU.

† VISWA, or WISMA KURMA, creator or maker of the world.

The cieling has been very handsomely painted in circles, many parts of which and the border, consisting of figures, are entire, both of men and women, the former of which are generally bareheaded, with short drawers or *cholnas;* the woman with only the lower parts covered. There is no inscription in the cave. There are groups of dancers and singers, with the same instruments as are now in use. Some of the painted figures have highly ornamented head dresses like *Tiaras;* but it seems an argument against the antiquity of the painting, that much of the fine sculpture and fluting of the pillars are covered by it, which, it may be supposed, would not have been done by the original artist.

The second excavation is named ADNAUT SUBBA, and is on the left hand entrance of the former. The entrance of this excavation is unfinished, and above the entrance has the figures of LUCHMEE NARRAIN, with two attendants, much injured by time and weather. At the extremity of the cave, opposite the entrance, is seated the idol ADNAUT; and from the left there is an opening into another cave of smaller dimensions, but infinitely better work; which is now so much choked with earth as to have left scarce more than the capitals of the pillars above the ground. The capitals are very handsomely finished in the style of the front ones of *Jugnath Subba.*

The third is INDUR SUBBA, and fronts the south. The entrance to this magnificent pagoda or assemblage of excavations is by a handsome gateway cut from the rock, on which are two lions couchant. There is a small cave, much choked, before the gateway, on the right hand. From the doorway opens an area, in which stands a pagoda or temple of a pyramidal form, in which is placed a kind of square altar, with figures on each side, of the same kind as in the last *Subba.* This temple is elaborately finished with sculpture, and a mass of sculptured rocks serves as the gate, left and fashioned when the avenue to the inner apartments was cut through the stony mountain.

In the same area, on the left hand side is a very handsome obelisk, the capital of which is beautified with a group of sitting human figures that are loosened from the mass. The obelisk is fluted and ornamented with great taste, and has a very light appearance.

On the right hand side of the area is an elephant, but without rider or *Hoda.*

On the left hand side of the same area is an excavation, with a figure like the preceding ones, in the recess opposite the entrance. In this there are also the remains of painting on the ceiling, &c. with abundance of sculptured figures on the sides within, and without of elephants, lions, &c. On the right hand side the excavations are imperfect above and below. After passing the same temple in the area is the entrance of the lower story of this *Subba,* which is in a very unfinished state, but has a figure in the recess opposite the entrance like the former.

From this lower story is the ascent to the upper by a flight of steps, on the right hand side, fronting the top of which is a gigantic figure of INDUR, with a *tiara* on his head, a *jinoee* or *Brahmin* string over his left shoulder, sitting on an elephant couched. Opposite to him is INDRANEE, his consort, seated under a mango tree on a lion. At the end of this cave is a recess with the same figure as the former, who seems to be the presiding idol. This room is formed into two nearly square divisions by twelve pillars. In the middle of the inner square is an altar.

The fourth cave is PURSARAM SUBBA. On the left hand side of the upper story of the *Indur Subba* there is a passage into this *Subba,* which, though smaller than any of the foregoing, is exactly alike, and equal to them in the fabric and preservation of its work. There is a passage from it into the upper story of *Jugnath Subba,* already described, which will explain the contiguity of these three caves.

The fifth is DOOMAR LEYNA. W. 15 S. distant from the last about a quarter of a mile.

The entrance to this stupendous excavation is through a cut or lane in the solid rocky mountain. On the left hand side of this lane is a cave that is near choked up with earth. The lane terminates from without at a doorway, which opens to an area, at the end of which, opposite the door, is a small cave. On the right hand of the area is the great excavation, having at its entrance two lions couchant, one of which has lost its head. The entrance to this cave is by a kind of veranda, on the left hand side of which is a gigantic sitting figure of DURMA rajah, with a club in his hand, and a *jinoee* over his shoulder. On the right hand WISWEYSHWUR MAHDEW, in a dancing attitude, with a group of figures round him, among which is the bull *Nundee.*

After passing this veranda the cave widens very considerably, and still more after passing the next section of pillars, till it reaches the centre or fourth section,

on the left of which is the centre door of a very fine square temple, on the right entrance of which is a fine standing figure of MUN, a *tiara* on his head, a *jinoee* on his shoulder, and BOUANNEE standing by him, with two small figures above.

On the other side are groups in a similar style, of sculptures of various deities of their mythology.

The end opposite the entrance by the alley, and which exactly resembles it, has a small area, descending a great depth by steps to a pool of water, supplied by a cascade that falls, during the rainy season, from the whole height of the mountain. Over the staircase is a small gallery, meant, seemingly, to sit and observe the falling stream.

On the right hand side, on entering from the avenue, there is a group of a standing woman and seven small figures, the left hand has nothing. On entering the first section of pillars there is, on the right hand, a representation of the nuptials of GOURA MAHDEW and PARWUTTEE, with a great number of figures above. Rajah DUTZ and ALIA, PARWUTTEE's father and mother on one side, and BRIMHA in a sitting posture, performing the marriage ceremony, with VISHNU standing behind him. In front of this group are the circles cut in the floor for performing the *Ludcha Home*, or nuptial sacrifices. On the left hand side is another group of MAHDEW and PARWUTTEE, with the bull NUNDEE.

There are, as in the other, remains of painting in this cave, but principally on the ceiling. The heads of the figures in this cave are generally adorned with highly decorated *tiaras*.

Number of pillars forty-four, the space occupied by the temple interrupting the ranges. It is well worthy notice, that one of the beams of stone that, crossing this cave, rests on the heads of the pillars is much thicker than the rest; which, it may be supposed, arose from the workmen perceiving some flaw in such an immense space of ceiling supporting such a mass of mountain above.

The sixth of these wonderful caverns is called JUNWASSA, *or the place of* NUPTIALS. Aspect W.N.W. This excavation is just across the chasm that lies between it and *Doomar Leyna*. It is much inferior to the preceding. It has a veranda with windows, by which the inner cave is enlightened, in which there are figures of MAHDEW, VISHNU, and BRIMHA, on the left of the door; BHULLEL, LUCHME, and NARRAIN on the right; and on the left hand extremity, of the *Bharra Outar*, in which the boar is represented as bearing *Priwee* or the world, on his tooth, and having *Seys* under his foot. On the right hand side is a sleeping figure of KOOM KURN, attended by a female. The entrance to this cave is from the veranda by the door. In it are no figures of any note, though there are niches.

The seventh is COMAR WARRA, *aspect* W.N.W. This cave is near the last. Its entrance deformed by fallen rock and accumulated earth. It is composed of four sections, divided by four pillars, though the outer one is unsupported by any at present, whatever it may have been formerly, and is from the immense overhanging mass of unsupported rock that the fragments have fallen, which deform and obstruct the entry. The four sections decrease gradually in length, the last being a recess. On each side of the door of which there are handsome colossal figures, the right hand one having a straight sword in his hand; the other is mutilated; but there is no figure within the recess, though there is a pedestal that seems intended to receive one.

The eighth is named GAANA, or the *oil-shop*. This is a small group of little rooms a few yards from the last, and probably takes its name from a place like that used by oilmen for expressing oil. It merits little notice otherwise than as exhibiting a figure of the idol GUNNES, and the *Ling of* MAHDEW. Very near it is another group of small rooms of nearly the same style, with *two Lings* of MAHDEW.

The ninth is NEELKUNT MAHDEW, *aspect* W.S.W. This excavation is a few yards from the last. At its entrance is the bull *Nundee*, in a square enclosure, on which time has made its ravages. After passing this figure of *Nundee* are a few steps, on each side of which on the wall at the extremity are two figures that seem to be a military class. Opposite the door is a recess with the *Ling of* MAHDEW, made of very fine smooth stone. This excavation, like many of the preceding ones, is composed of sections formed by rows of pillars, decreasing in lateral length to the recess.

The tenth cavern is RAMISHWUR, *aspect* W.S.W. This excavation is but a few yards from the last. The bull *Nundee* is couchant at its entrance, and on the left of it is a cistern of very fine water, which is descended by steps. Previous to entering the cave, on each side, at the extremities, are female figures. The front of this cave is supported by four pillars and two pilasters of considerable beauty, elaborately

sculptured. A female figure on the left hand pilaster has much grace. It is worthy notice, that the figures in the latter caves have universally highly ornamented head dresses, different from the first, which have only curled hair. Opposite the centre of the entrance is a large recess, containing a temple, in which the *Ling* of MAHDEW is placed. This cave consists of a large hall, and the recess in which the temple is situated. At each end of the hall are recesses, containing a profusion of figures. The *Nou Chunda* occupy the extreme wall of that to the right. On the right hand of this recess is a curious group of skeleton figures, said to represent a miser, his wife, son, and daughter, all praying in vain for food, while two thieves are carrying off his wealth. Opposite to this group is another of KAL BEHROO, the principal figure being in a dancing attitude, and musicians in the group.

Reentering the hall again from the recess, on the right is a group of MAHDEW and PARWUTTEE, playing at *Chousur*, with NARRAND sitting between them stimulating a feud, to which PARWUTTEE, by the throw of her right hand, seems well disposed; which is below represented as having taken place, while a burlesque figure on the right is turning up his posteriors to them.

On the right hand side of the left recess, at the end of the hall, is the group of BONANEE MYSASEER; on the left hand, that of SWAMMY KARTICK, with his peacock and two mendaseers.

On the extreme wall, in the centre of this recess, is represented the nuptials of JENNUCK Rajah, at which there is a great attendance of figures, and amongst them one holding a cocoa nut used on such solemnities. Below are sitting GUNNES, BRIMHA, &c. officiating at the marriage ceremonies.

Reentering the hall again from the left recess, there is on the left hand a group of GOURA and PARWUTTEE in heaven, supported by RONON.

On each side of the pillars, before entering the recess, are female figures.

On each side of the door of the temple in the recess are two gigantic and two smaller figures; the former said to be AHRAON Meyraon, the smaller ones KEYROO BHUT on the right, and VISHNOO on the left, challenging each other to a combat of wrestling.

Many of the pillars of this cave are elaborately ornamented. Very near the cave is another small one containing the *Ling* of MAHDEW, which does not require particular notice; and still a little further, another of considerable dimensions, but quite plain, and almost choked up within and at the entry.

There are also three or four other excavations of the same rank, between the lastmentioned and the next great work of *Keylas*.

The front of this excavation has four pillars and two pilasters; and at the commencement of the recess, two pillars and two pilasters.

The eleventh cavern is KEYLAS, *alias* PARADISE, *aspect* West. This wonderful place is approached more handsomely than any of the foregoing, and exhibits a very fine front, in an area cut through the rock. On the right hand side of the entrance is a cistern of very fine water. On each side of the gateway there is a projection reaching to the first story, with much sculpture and handsome battlements, which, however, have suffered much from the corroding hand of time. The gateway is very spacious and fine, furnished with apartments on each side that are now usually added to the *Dewries* of the eastern palaces. Over the gate is a balcony, which seems intended for the *Nobut Khanneh*. On the outside of the upper story of the gateway are pillars that have much the appearance of a *Grecian* order. The passage through the gateway below is richly adorned with sculpture, in which appear BONANNEE USHTBOOZA on the right, and GUNNES on the left. From the gateway you enter a vast area cut down through the solid rock of the mountain to make room for an immense temple, of the complete pyramidal form, whose wonderful structure, variety, profusion, and minuteness of ornament beggar all description. This temple, which is excavated from the upper region of the rock, and appears like a grand building, is connected with the gateway by a bridge left out of the rock, as the mass of the mountain was excavated. Beneath this bridge, at the end opposite the entrance, there is a figure of BONANNEE sitting on a lotus, with two elephants with their trunks joined, as though fighting, over her head. On each side of the passage under the bridge is an elephant, one of which has lost its head, the other its trunk, and both are much shortened of their height by earth. There are likewise ranges of apartments on each side behind the elephants, of which those on the left are much the finest, being handsomely decorated with figures. Advanced in the area, beyond the elephants, are two obelisks, of a

square form, handsomely graduated to the commencement of the capital, which seem to have been crowned with ornaments, but they are not extant, though, from the remains of the left hand one, I judge them to have been a single lion on each.

The twelfth cave is called DUS OUTAR, *aspect* W. A very small distance from *Keylas*. The access to it is by very rough steps in the rock, and the original entry being built up, you enter over the wall on the right hand into an excavated square area, on the left hand side of which is a small excavation. The middle of the area is occupied by what has been a very handsome square apartment, the ascent to the veranda of which, fronting the gateway, was by a handsome flight of steps forming a portico, the roof of which veranda was supported by two pillars, one of which having given way, the roof has fallen. The front of this square has a stone lattice in the centre, and figures in the compartments on each side. The top has been adorned with figures. The two corner ones seem to have been lions, but time has destroyed their form. On the right of this square apartment is a dry water cistern, but on the left there are cells with fine water and plenty, and I dare say a little care would supply the other. The front of the area is greatly filled up with earth from the surrounding hill, and no preventive now appears to its washing it with the rain. The entrance into the square apartment is from the main structure, if it may be so denominated, which has been fabricated downwards, which consists of two stories, having, both above and below, a front of six pillars and two pilasters. It appears to have been filling up fast; to prevent which, by a very temporary remedy, a trench is cut in the area in front of the fabric, and close to it. The lower story is quite plain, with two recesses or courts at each end, and all the pillars are devoid of ornament, being extremely square and massy. The passage into the upper story having been stopped up, it was with great difficulty I ascended through a small hole on the left hand side. The room above is of great dimensions, supported by eight rows of pillars in depth, all of which are square and quite plain, except the front row. At the extremity of the centre aisle is a recess containing the *Ling* of MAHDEW; and in the front of it, near the opposite end, is the bull *Nundee*, but without his head. The lateral walls, as well as that on each side of the recess of MAHDEW at the end, are adorned with mythological figures in very high preservation, and amongst which the *Dus Outar* (or ten incarnations) are conspicuous, whence I presume the place is named. In the centre of each side of the lateral walls there is an altar.

The thirteenth cave is TEEN TAL, *aspect* W. 10 S. Proceeding a few yards to the southward of *Dus Outar* you reach the excavation called *Teen Tal* (or three stories). The entrance to this structure is from a level surface, through a good gate in a wall left as the rock was hewn, into a fine area, as yet but little choked with earth or fragments. The front of this excavation has a fine and simple appearance, being composed of eight square pillars and two pilasters in each story, all of which are adorned except the centre ones of the ground story, the ornamenting of which, however, has not affected their quadrangular form. After entering the area a few paces it widens, and in the left hand corner is a reservoir of fine water; indeed, all the water in these cisterns is uniformly fine and clear. In the side of the area, opposite the water cistern, is a raised excavation, but of no note. The lower story consists of six pillars in depth, and at the extremity of the middle aisle is a recess containing a gigantic image of SEYS. Proceeding up the middle aisle the excavation narrows at the fourth pillar, and continues so to the end, having on each side a small room, and in the next panel on each side two very large sitting figures; that on the right of SUKUR ACHARY, and on the left of ADNAUT. On each side the door there are also large figures. Ascending from the ground floor by a good staircase on the right hand side, the raised recess mentioned above fronts you, which has a large sitting figure of COVERE, and several others that in any place would not be unworthy notice. Proceeding to ascend by the same fine stairs you enter the noble veranda of the second story; opposite the entrance of which is a recess with the figure of JUM seated in it. There is a doorway at each end of the veranda leading to four rooms in each extreme side of the rock. From these doors the wall of the rock is continued to the third pillar on each side, and to the second in depth, to give space for two rooms on each side, but without figures. This continuation of the wall narrows the opening of the temple, with the veranda, to two pillars and two pilasters. At the extremity of the centre aisle is a recess containing a very large sitting figure of LUCHMON, with two gi-

gantic figures on each side of the door. But before you reach the recess the room lessens again from the innermost row of pillars, to give space for two small rooms on each side. The greatest depth of this fine room has six pillars clear of wall, all of which are square and plain. Ascending from this story by a staircase at the opposite end of the veranda by which you enter it, but equally light and easy to ascend, you enter the third story by a door, on the left of which, in the landing place, is a small room, and opposite the entrance, at the end of the veranda, is a gigantic figure of SEY DEW; on his left, continuing by the lateral wall, is LUKKOOL, next to him BHEEM, then ARJUN, then DHURM rajah, being the five sons of Pundoo. Opposite to whom are, in similar niches, the figures of OODO, MADO, PENDA, and SUDAN; the space of the door occupying that of a fifth figure opposite to SEY DEW. Advancing through the middle aisle of this very fine temple, it is lessened at the six pillars to make room, on each side of this great recess, for fourteen sitting figures with curled hair. Advancing from thence you enter a kind of vestibule, very richly decorated with figures standing and sitting. And in the centre is a door leading into a recess, into which you descend by three steps. In front of the door there is a gigantic figure of RAM, sitting on a throne or altar, and attended on each side by the usual deities employed in his service. SETA being placed on the left hand side of the door on the wall opposite him. All the pillars of this very fine and capacious temple are square and plain, but the ceiling has the remains of painting.

The fourteenth cave is BHURT CHUTTERGHUN. *Front* W. 10 S. This is an excavation of two stories, or but of two remaining above ground, in good preservation; the staircase of which being choked up, you enter by the wall of the veranda. After the former descriptions there is nothing in this worthy of being particularized. It seems to take its name from its dedication to BHURT and CHUTTURGHUN, two brothers of RAMCHUNDER, whole figures by the *Brahmin's* account, are the chief ones in this place.

The fifteenth cave is BISKURMA, or VISWAKURMA KA JOOMPREE, or BISKURMA, *the Carpenter's Hovel. Front*, W. 5 S. (H. 1.) According to the legend BISKURMA* was the artist, who fabricated the whole of these wonderful works in a night of six months; but the cock crowing before they were finished, they remained imperfect and he retired, having wounded his finger, to this his hovel, in which state the figure in front of the entrance of this beautiful excavation is said to be a representation of him holding the wounded finger; but Sir Charles thinks, with all respect to the legend, that the figure is in the act of devout meditation, as many figures with similar positions of the hands occur. But quitting the fable for the fact, this excavation is in beauty inferior to none. In form it is unique, and in design elegant. The portico is light and striking to the beholder. On the right hand as you enter is a fine cistern of water. Above the gateway, which is richly sculptured on the outside, is a balcony, which seems well suited, if not intended for a music gallery to the interior temple, which has the appearance of an elegant chapel, with an arched roof, and is exactly in the style of a similar excavation at *Kanara*, on the island of *Salsette*, and another at *Ekvera*, near the top of *Bhore Ghaut*, first explored by Mr. Wales, the painter. At the upper end is a figure abovementioned. From the cieling are projected stone ribs, following the curvature of the arch to the capitals of the pillars on each side through the whole length of the excavation. Beside a grand aisle or body of the excavation, there is a small passage formed by the row of pillars on each side round the altar, but it is dark and narrow. This singular form of cave, from the orbicular cieling, and the name and attitude of its inhabitant, represents the Almighty meditating the creation of the world, under the arch or canopy of unlimited space.

The sixteenth cave is DEHR WARRA, *or the* HALLALCORE'S QUARTER. *Front bearing from Jugnath Subba*, distant about a a mile, S. 25 E.

By this designation have the *Brahmins*, who describe them, thought proper to discriminate this group of caves, which, though making no conspicuous figure here, would render any other place illustrious. They under this term of pollution endeavour to deter visitors from entering it, though the large cave is a very fine one, over the front of which a little river must rush in the rainy season into the plain below, forming a sheet of water that, in a beautiful cascade, must cover the front of the excavation as with a curtain of crystal. There are two stripes of stone that run parallel to each other along the floor, from the entrance, the whole depth of this cave

* Creator of the world, but allegorically, artificer of RAM.

(the prospect from which of the great tank, town, and valley of Ellora, &c. is beautiful), and seem intended as seats either for students, scribes, or the sellers of some commodities, a convenient passage lying between them up to the idol at the end of the cave.

Eloquence. [*eloquentia*, Lat.] *In painting and sculpture.* The power of speaking with fluency and elegance. According to Havercamp *Eloquence* was personified upon a medal of the Titian family by the figure of a bee, because Homer (Il. i. v. 250) calls Nestor "the sweet speaking Nestor, the pleasant orator of the Pylians, from whose tongue flowed words sweeter than honey." It is for this same reason, adds Winckelmann in his "*Traité sur l'Allégorie,*" that Theocritus gives to his Thyrsis a mouth filled with honey.

Elysium. [Lat. Ἠλύσιος, Gr.] *In the mythology of art.* The place assigned by the ancient poets for the abode of the souls of the virtuous after death. Called also the Elysian fields.

With the ancients Elysium is the region of bliss, the habitation of those who died for their country, those of pure lives, inventors of arts, and all who have done good to mankind. Virgil does not speak of any particular district, but supposes that all have the liberty of going where they please in that delightful region. He only mentions the Vale of Lethe or Forgetfulness, as appropriated to any particular use. Here, according to the Platonists and other philosophers, the souls which had gone through some periods of their trials were immersed in a river which gives name to the vale, in order to be put into new bodies, and to fill up the course of their probation in our world (Æn. vi. v. 660. 675. 679. 703. 749). The ancient as well as the modern poets never failed more in any thing than in making a heaven. Virgil's ideas, though preferable to Homer's, are still very mean. The persons in his Elysium are some dancing, others engaged in what they most delighted in whilst on earth. Thus Orpheus, for instance, is playing on his lyre. He speaks also of delightful groves and a cascade of water. But taking in all he says, his description of Elysium, and the pleasures enjoyed there are so very low, that it seems almost to be borrowed from the manner in which the common people of Rome passed their holidays on the banks of the Tyber. (Compare the description of one by Ovid, Fast. iii. v. 540, and of the other by Virgil, Æn. vi. v. 647. The fullest and best description is in Pindar, Olymp. od. 2.) Æacus, the proper judge of Elysium, is neither described by the poets nor represented by the artists; but Pluto and Proserpina are common subjects with both. Their palace stood where the three great roads of Hades meet, near the centre of their dominions. There is a great resemblance in the faces of the three brothers, Jupiter, Neptune, and Pluto, which appears in their several figures (and is certainly well preserved by Raffaelle in his feast of the gods, on the marriage of Cupid and Psyche), only the look of Jupiter is the most serene and majestic, and Pluto's the most sullen and severe. The poets make the same distinction. Statius calls him the black Jupiter, and his complexion (as well as his veil) should be dark and terrible. He is sometimes called Dis, as Proserpina is named Persephone. In one of the pieces of painting discovered about the end of the last century, in an old burial place of the Nassonian family, Pluto and Proserpina are sitting on thrones, whilst Mercury is introducing the ghost of a young woman, who seems intimidated at Pluto's stern look. Behind stands her mother, waiting to conduct her back to some grove in Elysium. Pluto holds a sceptre in his hand (Met. v. v. 420), and hath a veil over his head, which Claudian calls *Nubes*. Claud. de rapt. Pros. Ital. Theb. iv. v. 475, Theb. ii. v. 50, Stat. Theb. xii. v. 273, Luc. i. v. 577, Fast. iv. v. 44, Met. v. v. 470.

Elydoric Painting. [from Ἔλαιον oil, and ὕδωρ water.] *In painting.* A method of painting in a vehicle composed of oil and water. This method of painting, called Elydoric, was invented by M. Vincent of Montpetit. Its takes its name from the before quoted Greek words denoting oil and water, both these liquids being employed in its execution.

Its principal advantages are, that the artist is able to add the freshness of water colours, and the high finishing of miniature to the mellowness of oil painting, in such a manner that the work appears like a large picture seen through a concave lens.

The following is the manner of proceeding: a piece of very fine linen or white taffety is sized with starch in the most equal manner possible, on pieces of glass about two inches square, in order that the cloth may be without wrinkles. When these are sufficiently dry, a layer of white lead, finely ground in oil of pinks or poppies (the whitest that can be procured), is to be applied on them with a pallet knife.

To this layer, when dry enough to admit of scraping, more is to be added if necessary.

As it is of very great importance for the preservation of this kind of painting, that the layers be free from oil, that they may better imbibe the colours laid on them, it is necessary that their surface be made very smooth, and that it be very dry and hard.

The artist is next to procure a circle of copper, about two inches diameter and one fourth of an inch in height, extremely thin, and painted black on the inside. This circle is to contain the water on the surface of the picture.

Water distilled from rain or snow is preferable to any other; ordinary water, on account of the salts which it contains, being pernicious to this mode of painting.

The colours are to be finely levigated between two oriental agates, carefully preserved from dust, and mixed with oil of poppies, or any other cold siccative oil, which should be as limpid as water.

All the colours being ground, are to be placed in small parcels on a piece of glass, and covered with distilled water.

The materials being thus prepared, the subject to be painted is to be faintly traced with a black lead pencil on one of the pieces of cloth abovementioned. The tints are then to be formed on the pallet from the little heaps under the water; and the pallet placed, as usual, in the left hand. The picture is to be held between the thumb and forefinger, supported by the middle finger, and the necessary pencils the third and little fingers. The hands rest on the back of a chair to give a full liberty of bringing the work nearer to, or removing it far from the eye.

After having made the rough draught with the colours still fresh, the circle of copper, which is to surround the picture, is to be fitted exactly to the surface. Distilled water is then poured within this circle till it rises to the height of one-eighth of an inch, and the eye is held perpendicular over the object. The third finger of the right hand, while painting, should rest on the internal right angle of the picture. The work is then to be retouched, the artist adding colour and softening as he finds requisite. As soon as the oil swims on the top the water is poured off, and the picture carefully covered with a watch glass, and dried in a box by a gentle heat. When dry enough it is to be scraped nearly smooth with a knife, the artist repeating the former method till he is satisfied with his work.

It is at this period that the advantage of this new method particularly shows itself for the purpose of finishing; as the water poured on the picture discovers every fault of the pencil, and gives the power of correcting and perfecting it with certainty.

When the work is finished it is put under a fine glass, from which the external air is excluded, and then it is dried by means of a gentle heat.

Embellish, Embellishment. [from *embellir*, Fr.] *In all the arts.* Ornaments, adventitious beauty, decoration. This word, though applicable to all the arts, is more particularly used in architecture, which is embellished by sculpture, painting, and other ornaments to make it more beautiful. Embellishments are more extensive than ornaments, and if used profusely or with bad taste, will mar the finest composition. The embellishments of exterior architecture are its sculptures and carvings, and of interior architecture pictures, statues, bassi rilievi, furniture, mirrors, gilding, &c.

Emblemata. [Lat.] *In ancient architecture.* A species of inlaid work for the embellishment of panels, floors, &c. They were distinguished into *emblemata vermiculata, pavimenta tessalata, pavimenta musiva*, &c. The ancient poet Lucilius, quoted by Pliny, speaks of this kind of work as being used in Rome before the period of the war of Marius against the Cimbri, in the year U. C. 640, in the following verse,

"Ante pavimenta, atque emblemata vermiculata."

Emblems. [*emblema*, Lat. Ἔμβλημα, Gr.] *In all the arts.* Correctly speaking *emblems* are inlaid work, enamel, &c.; but in its modern and more extensive application, the word is used for any occult representation, allusive pictures or sculptures, and the like. *Emblems* and *attributes* belong to art, *allegory* to poetry. See Attributes, Allegory.

Emerald. [*emeraude*, Fr.] *In gem sculpture.* A green precious stone used by the ancients for sculptures of marine deities and aquatic subjects. The emerald, in its perfect state, is one of the most beautiful of gems, and varies in its shades from the deepest to the palest of greens. It is composed of silex, alumine, and carbonat of lime, and its colour is produced by chrome. The primitive form of the emerald is an hexagonal prism; but it is very frequently modified. Emeralds are at present only brought from Peru; but Mrs. Lowry conjectures that the ancients, who

valued them very much, procured them from Ethiopia. Pliny describes its brilliancy as being like the air that encircles us; and many of the ancients reckoned it as comforting to the eyes. The large emeralds that Herodotus and other ancient writers mention must, from their size, have been of other matter or of composition. The high value that the ancients set upon this gem is proved by the circumstance, that when the rich and luxurious Lucullus was at Alexandria, Ptolemy, who took every care to please this expensive Roman, could find nothing more precious or valuable to offer him than a fine emerald, on which was engraven a portrait of himself.

Emissarium. [Lat.] *In ancient architecture.* A canal formed with floodgates, sluices, &c. to regulate the waters in the great lakes of Italy. The two principal of which are those of the Lake Albano and of the Fucine Lake. The first emissaries that we read of go back to the earliest periods of the republic, and with the great sewers of Rome, prove to what a perfection the knowledge and practice of hydraulics, of levelling and of geometrical surveying had arrived among the Romans. During the siege of Veii by the Romans in the year U. C. 355, the rising of the waters of the Lake Albano gave them great uneasiness. This lake, which is about thirteen miles from Rome, is about eight miles in circumference, and of various depths. As this rising of the waters took place at the end of a dry summer, without any apparent cause, the Romans regarded the event as a prodigy, and sent a mission to consult the oracle at Delphos. The answer conformed to that of an Etruscan aruspexi, whom they made prisoner; which predicted that the Romans should capture Veii after they had given a passage to the overflowing waters. They therefore accomplished the emissarium of Albano in that bold, masterly, and durable manner that characterize all the works of the Romans. Kircher and the elder Piranesi examined this celebrated emissary with the greatest care. The latter in a very scientific and able point of view, and to whose work the architectural student is referred.

The emissary of the Fucine Lake was formed by the Emperor Claudius, and the ruins of the edifice which adorned and strengthened the entrance of the canal proves the strength, science, and solidity of the ancient Roman architecture. See Piranesi's *Antichità Albane.*

Emperors. [*imperator*, Lat.] *In the costume of painting and sculpture.* The Roman emperors are always to be known by their dress, which was peculiar to their rank. Their armour and military robes, or *vestes militares*, were the paludamentum, cuirass, helmet, &c. (see those words). Their other distinctive costume consisted of the *trabea*, of which there were three sorts, the purple for the gods, the purple mixed with white was for the emperors, and the other of purple and scarlet, woven together, was for the augurs. Among the other imperial habits are the vestes holoberæ (of the true purple), sericæ (of silk, whence the epithet sericatus homo, a silken man), Paragaudæ (Parthian), auro intextæ, &c. See Arms, Armour, Costume, Cuirass, &c.

Emplecton. [Lat. Ἔμπληκτον, Gr.] *In ancient architecture.* A mode of construction of walls used by the Greeks, and so named by their ancient architects and by Vitruvius. The front stones of this manner of building were wrought, and the interior left rough and filled in with stones of various sizes or rubble. The emplecton of the Romans was an inferior kind of masonry to that of the Greeks, for they mostly omitted the *diatonoi* or bond stones, which the Greeks never did. See Architecture, Diatonoi.

Emulation. [*æmulatio*, Lat.] *In all the arts.* That quality of the mind which engenders a desire of superiority. Without emulation no one can be an artist. This noble sentiment of the mind carries with it neither envy nor unfair rivalry, but inspires a powerful inclination to surpass all others by superiority alone. Such was the emulation and rivalry between Zeuxis and Parrhasius, which caused the improvement of both; and similar thereto was that which inspired the masterminds of Michel Angiolo and Raffaelle; of Titian and Pordenone; and of Agostino and Annibale Caracci; and with similar results. Raffaelle's talents were excited by the presence of Michel Angiolo in Rome, which had laid dormant during that great man's absence, and both the Caracci declined when their competition ceased, as is proved by the following facts.

The confraternity of the Chartreuse at Bologna proposed to the artists of Italy to paint a picture for them in competition, and to send sketches or designs for selection. The Caracci were among the competitors, and the sketch of Agostino was preferred, which first gave rise, say some authors, to the jealousy between the two

brothers. The picture which Agostino painted is his celebrated communion of St. Jerome, that was formerly in the Louvre. This fine picture represents the venerable saint who feeling approaching dissolution, is carried to the church of Bethlehem, where he receives the last sacrament of the Romish church, the Viaticum, in the midst of his disciples, while a monk writes down his last words. It is reckoned the masterpiece of the artist. The two brothers then commenced the Farnese gallery in conjunction, but the jealous feelings which existed between them separated them. Agostino, who was, according to all authority, the best tempered of the two, gave himself up entirely to the practice of his art. The noble emulation of high minds was lost, in this instance, in the meaner spirit of jealousy and rivalry.

ENAMEL. [a compound word formed by a junction of the inseparable particle *en*, which we have borrowed from the French, and by them from the Latin *in*; and the old English word *amel*, taken from the *email* of the French, both signifying the material used in overlaying the variegated works which we call *en amel*led.] *In painting*. The art of variegating with colours laid upon or into another body. Also a mode of painting, with vitrified colours, on gold, silver, copper, &c. and of melting it at the fire, or of making divers curious works in it at a lamp. This art is of so great antiquity as to render it difficult or impossible to trace it to its origin. It was evidently practised by the Egyptians, from the remains that have been observed on the ornamented envelopes of mummies. From Egypt it passed into Greece, and afterwards into Rome and its provinces, whence it was probably introduced into this country, as various Roman antiquities have been dug up in different parts of Britain, particularly in the Barrows, in which enamels have formed portions of the ornaments. The following are instances in proof of the antiquity of the art in this country: a jewel found at Athelney in Somersetshire, and preserved at Oxford, bears witness to it, and by an inscription upon it, there is no doubt it was made by order of Alfred. The gold cup given by King John to the corporation of Lynn in Norfolk proves that the art was known among the Normans, as the sides of the cup are embellished with various figures whose garments are partly composed of coloured enamels. The tomb of Edward the Confessor in Westminster Abbey, built in the reign of Henry III. is ornamented with enamels; and a crosier of William of Wykeham, in the time of Edward III, exhibits curious specimens of the application of the art of enamelling.

Enamels are vitrifiable substances, and are usually arranged into three classes, namely, the transparent, the semitransparent, and opaque. The basis of all kinds of enamel is a perfectly transparent and fusible glass, which is rendered either semitransparent or opaque by the admixture of metallic oxydes. M. Klaproth, some years ago, read to the Royal Academy of Sciences of Berlin a very elaborate paper, the result of much research, "On the pastes, coloured glasses, and enamels of the ancients." From this we learn that the art of colouring glass seems to be of nearly the same antiquity as the invention of making it; which is proved, not only from written documents, but likewise by the variously coloured glass corals with which several of the Egyptian mummies are decorated. This art supposes the possession of some chymical knowledge of the metallic oxydes, because these are the only substances capable, as far as we now know, of producing such an effect. Still a difficulty occurs: what were the means and processes employed by the ancients for this purpose? as they had no acquaintance with the mineral acids, which at present are usually employed in the preparation of metallic oxydes.

It is, however, certain that the art of giving various colours to glass must have obtained a considerable degree of perfection, as Pliny mentions the artificial imitation of the "Carbuncle," which was, at that time, a gem in the highest estimation. During the reign of Augustus, the Roman architects began to make use of coloured glass in their Musaic decorations: thus it is known that an application of glass pastes was resorted to in a villa built by the Emperor Tiberius on the island of Capri. Several specimens of this coming into the possession of Klaproth, were subjected, by that able chymist, to a chymical analysis; and he has detailed a very particular account of the several processes which he performed to ascertain the component parts of the different coloured glasses found in the ruins of the abovementioned villa. His first attempt was upon the antique red glass, of which the colour is described as of a lively copper red. The mass was opaque and very bright at the place of fracture; and of two hundred grains finely triturated, he found the constituent parts to be,

Silex	142 grains.
Oxyde of lead	28
Oxyde of copper	15
Oxyde of iron	2
Alumine	5
Lime	3
	195
Loss	5
	200

On comparing the external characters of this red glass paste with the cupreous scoriæ of a lively brown red, such as is sometimes obtained on melting copper ores; M. Klaproth imagines that the ancients did not compound the abovementioned paste directly from its constituent parts, but instead of them employed, perhaps, copper scoriæ. And he adds, on this supposition, they had nothing more to do than to select the best coloured pieces to fuse and cast them into plates.

In green glass he found the constituent parts the same as in the red, but in different proportions. Both receive their colour from copper; and the reason why this metal produces in the one a red and in the other a green colour depends on the different degrees of its oxygenation: it being an ascertained fact, that copper, in the state of a suboxyde, that is, only half saturated with oxygen, produces a reddish enamel, but when fully saturated with oxygen, the enamel yielded is green.

M. Klaproth next analyzed the blue glass paste, in which he found, next to the silex, that the oxyde of iron is the most predominating article. He expected to find that the colour had been given by cobalt, but could not discover the smallest trace of it, and therefore he infers that its blue colour entirely depends on the iron. This excited in him no surprise, knowing that iron, under certain circumstances, is capable of producing a blue enamel, as is clearly exhibited by the beautiful blue coloured scoriæ of iron, which are frequently met with in the highly heated furnaces on smelting iron stones. Our object in referring to these experiments is the fact that the coloured glass pastes of the ancients agree, in many respects, with modern enamels.

According to the writers in Dr. Rees's New Cyclopedia, white enamels are composed by melting the oxyde of tin with glass, and adding a small quantity of manganese to increase the brilliancy of the colour. The addition of oxyde of lead or antimony produces a yellow enamel; but a more beautiful yellow may be obtained from the oxyde of silver. Reds are formed by an intermixture of the oxydes of gold and iron, that composed of the former being the most beautiful and permanent. Greens, violets, and blues are formed from the oxydes of copper, cobalt, and iron; and these, when intermixed in different proportions, afford a great variety of intermediate colours. Sometimes the oxydes are mixed before they are united to the vitreous bases. Such are, according to this author, the principal ingredients employed in the production of various enamels; but the proportions in which they are used, as well as the degree and continuance of the heat necessary to their perfection constitute the secrets of the art. Besides these there are probably other substances occasionally used in the composition of enamels, and it has been asserted that the peculiar quality of the best kinds of Venetian enamel is owing to the admixture of a particular substance found on Mount Vesuvius, and ascertained to be thrown up by that volcano.

The principal quality of good enamel, and that which renders it fit for being applied on baked earthenware or on metals, is the facility with which it acquires lustre by a moderate heat, or cherry-red heat, more or less, according to the nature of the enamel, without entering into complete fusion. Enamels applied to earthenware and metals possess this quality. They do not enter into complete fusion; they assume only the state of paste, but of a paste exceedingly firm; and yet when baked one might say that they had been completely fused. There are two methods of painting on enamel: on raw or on baked enamel. Both these methods are employed, or may be employed for the same object. Solid colours, capable of sustaining the fire necessary for baking enamel ground, may be applied in the form of fused enamel on that which is raw, and the artist may afterwards finish with the tender colours. The colours applied on the raw material do not require any flux; there is one, even, to which silex must be added, that is, the calx of copper, which gives a very beautiful green: but when you wish to employ it on the raw material you must mix with it about two parts of its weight of silex, and bring the mixture into combination by means of heat. You afterwards pulverise the mass you have thus obtained in order to employ it. To obtain good white enamel, it is of great importance that the lead and tin should be very pure. If these metals contain copper or anti-

mony, as is often the case, the enamel will not be beautiful. Iron is the least hurtful.

Of coloured enamels.—All the colours may be produced by the metallic oxydes. These colours are more or less fused in the fire according as they adhere with more or less strength to their oxygen. All metals which readily lose their oxygen cannot endure a great degree of heat, and are unfit for being employed on the raw materials.

Purple.—This colour is the oxyde of gold, which may be prepared different ways, as by precipitating, by means of a muriatic solution of tin, a nitro-muriatic solution of gold much diluted in water. The least quantity possible of the solution of tin will be sufficient to form this precipitate. The solution of tin must be added gradually until you observe the purple colour begin to appear: you then stop, and having suffered the colour to be deposited, you put it into an earthen vessel to dry slowly. The different solutions of gold, in whatever manner precipitated, provided the gold is precipitated in the state of an oxyde, give always a purple colour, which will be more beautiful in proportion to the purity of the oxyde, but neither the copper or silver with which gold is generally found alloyed injure this colour in a sensible manner: it is changed, however, by iron. The gold precipitate, which gives the most beautiful purple, is certainly fulminating gold, which loses that property when mixed with fluxes. Purple is an abundant colour; it is capable of bearing a great deal of flux, and in a small quantity communicates its colour to a great deal of matter. It appears that saline fluxes are better suited to it than those in which there are metallic calces. Those, therefore, which have been made with silex, chalk, and borax, or white glass, borax, and a little white oxyde of antimony, with a little nitre, as I have already mentioned, ought to be employed with it. Purple will bear from four to twenty parts of flux, and even more, according to the shade required. Painters in enamel employ generally for purple a flux which they call brilliant white. This flux appears to be a semiopaque enamel, which has been drawn into tubes, and afterwards blown into a ball at an enameller's lamp. These bulbs are afterwards broken in such a manner, that the flux is found in small scales, which appear like the fragments of small hollow spheres. Enamel painters mix this flux with a little nitre and borax. This matter, which produces a very good effect, was employed without attempting to decompose it. It may be a very fusible common white enamel which has been blown into that form. It is to be remarked, that purple will not bear a strong heat; and the colour is always more beautiful if the precipitate is ground with the flux before it has become dry.

Red.—We have no metallic oxyde capable of giving directly a fused red; that is to say, we have no metallic calces which, entering into fusion and combining, under the form of transparent glass, with fluxes or glass, give directly a red colour. To obtain this colour, it must be compounded different ways, as follows:—Take two parts, or two parts and a half (you may, however, take only one part) of sulphate of iron and of sulphate of alumine, fuse them together in their water of crystallization, and take care to mix them well together. Continue to heat them to complete dryness; then increase the fire so as to bring the mixture to a red heat. The last operation must be performed in a reverberating furnace. Keep the mixture red until it has every where assumed a beautiful red colour, which you may ascertain by taking out a little of it from time to time, and suffering it to cool in the air. You may then see whether the matter is sufficiently red: to judge of this it must be left to cool, because while hot it appears black. The red oxydes of iron give a red colour; but this colour is exceedingly fugitive; for as soon as the oxyde of iron enters into fusion, the portion of oxygen, which gives it its red colour, leaves it, and it becomes black, yellow, or greenish. To preserve, therefore, the red colour of this oxyde in the fire, it must be prevented from vitrifying and abandoning its oxygen. I have tried (says M. Clouet) a variety of different substances to give it this fixity, but none of them succeeded except alum. The doses of alum and sulphate of iron may be varied. The more alum you add the paler will be the colour. Three parts of alum to one of sulphate of iron give a colour which approaches a flesh colour. It is alum also which gives this colour the property of becoming fixed at a very strong heat. This colour may be employed on raw enamel; it has much more fixity than the purple, but not so much as the blue of cobalt. It may be washed to carry off the superfluous saline matter, but it may be employed also without edulcoration; in that state it is even more fixed and more beautiful. It does not require much flux; the flux which appeared to me to be best suited to it is composed of alum,

minium, marine salt, and enamel sand. This flux must be compounded in such a manner as to render it sufficiently fusible for its objects: from two or three parts of it are mixed with the colour. In general three parts of flux are used for one of colour; but this dose may and ought to be varied according to the nature of the colour and the shade of it required. Red calx of iron alone, when it enters into fusion with glass, gives a colour which seems to be black; but if the colour be diluted with a sufficient quantity of glass, it at last becomes of a transparent yellow. Thus the colour really produced by calx of iron combined with glass is a yellow colour, but which being accumulated becomes so dark, that it appears black. In the process above given for making the red colour, oxyde of iron does not fuse; and this is the essential point; for if this colour is carried in the fire to vitrification, it becomes black or yellowish, and disappears if the coat be thin, and the oxyde of iron present be only in a small quantity.

Yellow.—Though yellow may be obtained in a direct manner, compound yellows are preferred because they are more certain in effect, and more easily applied, than the yellow which may be directly obtained from silver. The compound yellows are obtained in consequence of the same principles as the red colour of iron. For this purpose we employ metallic oxydes, the vitrification of which must be prevented by mixing with them other substances, such as refractory earths or metallic oxydes difficult to be fused. The metallic calces which form the basis of the yellow colours are generally those of lead; as minium, the white calx of lead, or litharge, the white calx of antimony, called diaphoretic antimony; that called "crocus metallorum" is also employed. This regulus pulverized, and mixed with white oxyde, gives likewise a yellow. The following are the different compositions used: one part of the white oxyde of antimony, one part of the white oxyde of lead (or two or three), these doses are exceedingly variable; one part of alum, and one of salammoniac. When these matters have been all pulverised and mixed well together, they are put in a vessel over a fire sufficient to sublimate and decompose the salammoniac; and when the matter has assumed a yellow colour, the operation is finished. The calces of lead mixed in a small quantity either with silex or alumine, also with the pure calx of tin, exceedingly white, gives likewise yellows. One part of the oxyde of lead is added to two, three, or four of the other substances abovementioned. In these different compositions for yellow you may use also oxyde of iron, either pure or that kind which has been prepared with alum and vitriol of iron; you will then obtain different shades of yellow. From what has been said, you may vary these compositions of yellow as much as you please. Yellows require so little flux that one or two parts, in general, to one of the colour are sufficient. Saline fluxes are improper for them, and especially those which contain nitre. They must be used with fluxes composed of enamel sand, oxyde of lead, and borax, without marine salt. A yellow may be obtained also directly from silver. All these mixtures may be varied, and you may try others. For this purpose you may use sulphate of silver, or any oxyde of that metal mixed with alumine or silex, or even with both, in equal quantities. The whole must be gently heated until the yellow colour appears, and the matter is to be employed with the fluxes pointed out for yellow. Yellow of silver, like purple, cannot endure a strong heat; a nitric solution of silver may be precipitated by the ammoniacal phosphate of soda, and you will obtain a yellow precipitate which may be used to paint in that colour with fluxes, which ought then to be a little harder. Besides the methods abovementioned, the best manner of employing the oxyde of silver is, in my opinion, to employ it pure: in that case you do not paint but stain. It will be sufficient then to lay a light coating on the place which you wish to stain yellow, and to heat the article gently to give it the colour. You must not employ too strong a heat: the degree will easily be found by practice. When the article has been sufficiently heated, you take it from the fire and separate the coating of oxyde, which will be found reduced to a regulus. You will then observe the place which it occupied tinged of a beautiful yellow colour without thickness. It is chiefly on transparent glass that this process succeeds best. Very fine silver filings produce the same effect: but what seemed to succeed best in this case was sulphate of silver well ground up with a little water, that it may be extended very smooth. From what has been said, it may readily be seen that this yellow must not be employed like other colours; that it must not be applied till the rest have been fused; for, as it is exceedingly fusible and ready to change, it would be injured by the other colours; and as the coating of silver, which is reduced, must be removed,

the fluxes would fix it, and prevent the possibility of its being afterwards separated. Working on glass is not attended with this inconvenience, because the silver yellow is applied on the opposite side to that on which the other colours are laid.

Green.—Green is obtained directly from the oxyde of copper. All the oxydes of copper are good; they require little flux, which even must not be too fusible: one part or two of the flux will be sufficient for one oxyde. This colour agrees with all the fluxes, the saline as well as the metallic, which tends to vary a little the shades. A mixture of yellow and blue is also used to produce greens. Those who paint figures or portraits employ glass composed in this manner; but those who paint glazed vessels, either earthenware or porcelain, employ in general copper green. Independently of the beautiful green colour produced by oxydated copper, it produces also a very beautiful red colour. This beautiful red colour, produced by copper, is exceeding fugitive. The oxyde of copper gives red only when it contains very little oxygen, and approaches near to the state of a regulus. Notwithstanding the difficulty of employing this oxyde for a red colour, a method has been found to stain transparent glass with different shades of a very beautiful red colour by means of calx of copper. The process is as follows: you do not employ the calx of copper pure, but add to it calx of iron, which, for that purpose, must not be too much calcined; you add also a very small quantity of calx of copper to the mass of glass which you are desirous of tinging. The glass at first must have only a very slight tinge of green, inclining to yellow. When the glass has that colour you make it pass to red, and even a very dark red, by mixing with it red tartar in powder, or even tallow. You must mix this matter well in the glass, and it will assume a very dark red colour. The glass swells up very much by this addition. Before it is worked it must be suffered to settle, and become compact; but as soon as it has fully assumed the colour, it must be immediately worked, for the colour does not remain long, and even often disappears while working; but it may be restored by heating the glass at the flame of a lamp. It is difficult to make this colour well, but when it succeeds it is very beautiful, and has a great deal of splendour. By employing the calx of copper alone for the processes abovementioned, you will obtain, when you succeed well, a red similar to the most beautiful carmine. The calx of iron changes the red into vermilion, according to the quantity added. If we had certain processes for the making this colour, we should obtain all the shades of red from pure red to orange, by using, in different proportions, the oxyde of copper and that of iron. The calx of copper fuses argil more easily than silex: the case is the same with calx of iron. If you fuse two or three parts of argil with one of the oxyde of copper, and if the heat be sufficient, you will obtain a very opaque enamel, and of vermilion red colour. The oxyde of copper passes from red to green, through yellow, so that the enamel of copper, which becomes red at a strong heat, may be yellow with a weaker heat. The same effect may be produced by deoxydating copper in different degrees: this will be effected according as the heat is more or less violent. The above composition might, I think, be employed to give a vermilion red colour to porcelain. The heat of the porcelain furnace ought to be of sufficient strength to produce the proper effect. The calx of iron fused also with argil, in the same proportions as the calx of copper, gives a very beautiful black. These proportions may, however, be varied.

Blue.—Blue is obtained from the oxyde of cobalt. It is the most fixed of all colours, and becomes equally beautiful with a weak as with a strong heat. The blue produced by cobalt is more beautiful the purer it is, and the more it is oxydated. Arsenic does not hurt it. The saline fluxes which contain nitre are those best suited to it: you add a little also when you employ that flux which contains a little calcined borax or glass of borax, though you may employ it also with that flux alone. But the flux which, according to my experiments, gives to cobalt-blue the greatest splendour and beauty is that composed of white glass (which contains no metallic calx), of borax, nitre, and diaphoretic antimony well washed. When this glass is made for the purpose of being employed as a flux for blue, you may add less of the white oxyde of antimony: a sixth of the whole will be sufficient.

Violet.—Black calx of manganese, employed with white fluxes, gives a very beautiful violet. By varying the fluxes the shade of the colour may also be varied. It is very fixed as long as it retains its oxygen. The oxyde of manganese may produce different colours; but for that purpose it will be necessary that we should be able to fix its oxygen in it in different proportions. How to effect this has, perhaps, never yet been discovered. These

are all the colours obtained from metals. From this it is evident that something still remains to be discovered. We do not know what might be produced by the oxydes of platina, tungsten, molybdena, and nickel: all these oxydes are still to be tried; each of them must produce a colour, and perhaps red, which is obtained neither directly nor with facility from any of the metallic substances formerly known and hitherto employed.

Having laid before the English artists the result of M. Clouet's Researches, as they were presented to the French National Institute, of which he was an associate, I shall add a few general observations taken from those of our own countrymen, who have made the subject of enamelling their study and employment. The most beautiful and expensive colour known in this branch of the art is an exquisitely fine, rich, and purplish tinge, given by the salts and oxydes of gold, especially the purple precipitate formed by tin in one form or other, and the nitro-muriate of gold, and also by fulminating gold. This fine colour, however, requires much skill in the artist to be fully brought out. Other and commoner reds are given by the oxydes of iron, but this requires the mixture of alumine, or some other substance refractory in the fire; otherwise what would, under proper circumstances, be a full red will degenerate into a black.

Yellow is either given by the oxyde of silver alone, or by the oxydes of lead and antimony, with similar mixtures to those required with iron. The silver is as tender a colour as gold, and as readily injured or lost in a high heat. Green is given by the oxyde of copper, or it may also be produced by a mixture of yellow colours. Blue is given by cobalt, and this seems the most certain of all enamel colours, and as easy to be managed. Black is produced by a mixture of cobalt and manganese. "The reader," says Mr. Aikin in his Chymical Dictionary, "may conceive how much the difficulties of this nice art are increased, when the object is not merely to lay a uniform coloured glazing on a metallic surface, but also to paint that surface with figures and other designs that require extreme delicacy of outline, accuracy of shading, and selection of colouring. The enamel painter has to work not with actual colours, but with mixtures which he knows, from experience, will produce certain colours after the operation of the fire, and to the common skill of the painter in the arrangement of his pallet and the choice of his colours; the enameller has to add an infinite quantity of practical knowledge of the chymical operation of one metallic oxyde on another, the fusibility of his materials, and the utmost degree of heat at which they will attain not only the accuracy of the figures which he has given, but the precise shade of colour which he intends to lay on. Painting in enamel requires a succession of firings; first of the ground which is to receive the design, and which itself requires two firings, and then of the different parts of the design itself. The ground is laid on in the same general way as the common watch face enamelling already described. The colours are the different metallic oxydes melted with some or other vitrescent mixture, and ground to extreme fineness. These are worked up with an essential oil, that of spike is preferred, and next to it the oil of lavender, to the proper consistence of oil colours, and are laid on with a very fine hair brush. The essential oil should be very pure, and by the use of this, rather than any fixed oil, is probable that the whole may evaporate completely in a moderate heat, and leave no carbonaceous matter in contact with the colour when red hot, which might affect its degree of oxydation, and thence the shade of colour which it is intended to produce. As the colour of some of the vitrified metallic oxydes, such as that of gold, will stand only at a moderate heat, while others will bear and even require a higher temperature to be properly fixed, it forms a greater part of the technical skill of the artist to apply different colours in their proper order; fixing first those shades which are produced by the colours that will endure the highest degree of heat. The outline of the design is first traced on the enamel ground, and burnt in; after which the parts are filled up gradually with repeated burnings to the last and finest touches of the tenderest enamel."

Those who paint on enamel, on earthenware, porcelain, &c. must regulate the fusibility of the colours by the most tender of those employed, as, for example, the purple. When the degree which is best suited to purple has been found, the other less fusible colours may be so regulated (by additions of flux), when it is necessary to fuse all the colours at the same time, and at the same degree of heat. You may paint also in enamel without flux; but all the colours do not equally stand the heat which must be employed. If the enamel, however, on which you paint be very fusi-

ble, they may all penetrate it. This manner of painting gives no thickness of colour; on the contrary, the colours sink into the enamel at the places where the tints are strongest. To make them penetrate and give them lustre, a pretty strong fire will be necessary to soften the enamel and bring it to a state of fusion. This method cannot be practised but on enamel composed with sand, which is called enamel sand, as already mentioned. It may be readily seen, also, that the colours and enamel capable of enduring the greatest heat will be the most solid, and the least liable to be changed by the air.

The following method of filling up engraving on silver with a durable black enamel is practised in Persia and India.

They take half an ounce of silver, two ounces and a half of copper, three ounces and a half of lead, twelve ounces of sulphur, two ounces and a half of sal-ammoniac. The metals are melted together and poured into a crucible, which has been before filled with pulverised sulphur, made into a paste by means of water; the crucible is then immediately covered that the sulphur may not take fire, and this regulus is calcined over a smelting fire until the superfluous sulphur be burned away. This regulus is then coarsely pounded, and, with a solution of sal-ammoniac, formed into a paste, which is rubbed into the engraving on silver plate. The silver is then wiped clean, and suffered to become so hot under the muffle, that the substance rubbed into the strokes of the engraving melts and adheres to the metal. The silver is afterwards wetted with the solution of sal-ammoniac, and again placed under the muffle till it becomes red hot. The engraved surface may then be smoothed and polished without any danger of the black substance, which is an artificial kind of silver ore, either dropping out or decaying. In this manner is all the silver plate brought from Russia ornamented with black engraved figures.

The foregoing detailed account of the mechanical process of enamelling is extracted and condensed from several of the best practical works, particularly from the long and elaborate article thereon, in MARTIN'S *Circle of the Mechanical Arts*, 4to. Lond. 1815.

The town of Limoges was very celebrated in the twelfth and thirteenth centuries for the excellence of its enamels on various metals. In 1197, tables, vases, basins, tabernacles, candelabra, crosiers, &c. enriched with enamels, were called *opus de Limogia*, *labor Limogiæ*, *opus Lemoviticum*, and are still known to dealers in curiosities of this nature as enamels of Limoges.

The principal artists who have excelled in this beautiful department of the fine arts are PRIMATICCIO and Maitre ROUX, who introduced a pure taste in arabesques and other pictorial ornaments, which were beautifully executed in enamel. RAFFAELLE and MICHEL ANGIOLO also gave designs for enamels on porcelain and earthenware, many of which are still called Raffaelle's ware or China. Enamelling on metal is of later invention, and is attributed to the French, particularly the smaller and more elegant subjects of history, poetry, and fancy. The first artist who distinguished himself in this latter department, and in fact, as its inventor, was JEAN TOUTIN, a goldsmith at Chateaudun. He was succeeded by his disciple GRIBELIN, who was also an excellent artist and workman. DUBIE, a goldsmith, made excellent enamels in the galleries of the Louvre. MORLIERE, a native of Orleans, but who practised at Blois, followed soon after; and was much admired for his miniature enamels for rings and watch cases. He had for a disciple ROBERT VAUQUER of Blois, who surpassed all his predecessors, particularly in his colouring; he died in 1670. *Pierre* CHARTIER, also of Blois, was a celebrated enamelist, particularly in flowers. *Jean* PETITOT, who died in 1691, succeeded as an enamelist of high repute, and practised in England, where his works are well known and deservedly admired. BORDIER followed in the same line, and also practised in this country; as did *Louis* HANCE and *Louis* DE GUERNIER. ZINCK, a Swede, has also obtained a high reputation for the excellence of his works; as did an artist of the name of BOIY, whose character, as an artist, is given in WALPOLE'S Anecdotes of Painters. One of his enamels is there mentioned as being of the extraordinary dimensions of twenty-two inches by sixteen; which have, however, been exceeded by our native artists BONE and MUSS. We have also to notice, as eminent practitioners in this art, SCHNELL, who died in 1704; *Sophia* CHERON, in 1711; CHATILLON, in 1732; *Ism.* MENGS, in 1761; NELSON, in 1770; MEYTENS, a Swede, in 1770; ROUQUET, who practised in England, and wrote upon the arts; LIOTARD, DURAN, PAGUIER.

Enamelling on plates of metal, and painting with vitrified colours on glass, are

practised with great success in England, and few artists in Europe have equalled the fine and numerous works of Bone, and the beautiful colouring of Muss, who, to the great loss to the art, has recently died at a very early age. We have also other young and rising artists in this durable and elegant department of painting.

The best works for consultation on enamelling are those before quoted. The *Traité pratique des Couleurs pour la Peinture en Email et sur la Porcelaine; l'Art de peindre sur Email*, par D'Arclais de Montamy, 12mo. Paris, 1765. This work is also placed at the beginning of the Abbé Pernetty's *Dictionnaire portatif de Peinture*. The chapter entitled *de Smalto, sive Encausto*, in the work of Boulanger, *de Pictura; l'Art du Feu;* ou, *de peindre en Email*, 8vo. Paris, 1759. The 13th chapter of *Elémens de Peinture pratique*, par Haudicquer de Blancourt, in the *Traité d'Architecture de* Felibien. A chapter in the *Etat présent des Arts en Angleterre*, par M. Rouquet, which has been translated into English, and published the year following in London.

Encarpus. [Lat. Ἔγκαρπος, Gr.] *In ancient architecture.* Festoons of fruit or flowers in friezes or capitals.

Encaustic Painting. [*encausticus*, Lat. Ἐγκαυστική, Gr.] *In painting.* The art of painting in encaustic is a manner of painting which is executed with the operation of fire. Ancient authors often make mention of this species of painting, and which, if it had been described simply by the word *encaustic*, which signifies executed by fire, might be supposed to have been a species of enamel painting. But the expressions *encausto pingere, pictura encaustica, ceris pingere, picturam inurere*, by Pliny and other ancient writers, makes it clear another species of painting is thereby meant. We have no ancient pictures of this description, and therefore the precise manner adopted by the ancients is not completely developed, though many moderns have closely investigated the subject, and described their processes. At what time, and by whom this species of painting was first invented, is not determined by antiquaries, although it appears to have been practised in the fourth and fifth centuries*. Count Caylus and M. Bachelier, a painter, were the first of modern times who made experiments in this branch of art, about the year 1749. Some years after this, Count Caylus presented to the Academy of Painting at Paris his ideas and experiments on the subject of the ancient manner of painting in encaustic. In 1754 the count had a head of Minerva painted by Mons. Vien, after the process described by himself, and presented it to the Academy of Sciences in 1755. This success induced Mons. Bachelier to recommence his experiments, in which he succeeded better than formerly; but his manner of painting in encaustic differed from the ancients, as described by Pliny, and therefore he was unsuccessful, inasmuch as he did not discover the *real* ancient manner; after this he made some other experiments on the same subject, differing from the process as described by Caylus and others.

Pliny, in a passage relating to encaustic painting, distinguishes three species: —1st, that in which they used a style, and painted on ivory or polished wood *(cestro in ebore)*; for which purpose they drew the outlines on a piece of the aforesaid wood or ivory, previously soaked or imbued with some certain colour; the point of the style or stigma served for this operation, and the broad end to scrape off the small filaments that arose from the outlines, and they continued forming outlines with the point till they were finished. 2nd. The next manner appears to have been, where the wax previously impregnated with colour was spread over the surface of the picture with the style, and the colours thus prepared were formed into small cylinders for use. By the side of the painter was a brasier for keeping the styles continually hot, with the points of which they laid on the colours when the outlines were finished, and spread them smooth with the broad end, and thus they proceeded till the picture was finished. 3rd. The manner was by painting with a pencil in wax liquified by fire: by this method the colours contained a considerable hardness, and could not be damaged either by the heat of the sun or the deleterious effects of sea water. It was thus that they painted their ships with emblems and other pictures, and therefore it obtained the name of *ship painting*. The last process was to smooth and polish the picture;—thus far the ancients.

Few of late years have made more experiments in this mode of painting than the ingenious Mrs. Hooker of Rottingdean, in the county of Sussex, who has, in this instance, united practice with theory; and for her very successful exertions in this branch of the polite arts, was presented with a gold palette by the Society for the

* Vicenzo Requeno has treated the subject in a very masterly and scientific manner in a work called *Saggi sul Ristabilimento dell' antica Arte de Greci e Romani Pittori*, published at Parma, 1787.

[illegible]

[illegible]

[illegible]

burning application (abbrucciamento), is derived from a Greek word.

We have never thoroughly known the nature of the Punic wax, which was anciently used, and which, after all, was the essential ingredient of the ancient painting in encaustic. The chevalier praises the genius and industry of M. Requeno and M. Bachelier, who have also treated this subject, but who have not fully succeeded in finding out the true way of making the said wax, then quotes the passage of Pliny on the method of making it. *Punica fit hoc modo*, &c. see Pliny's Nat. Hist. l. 21. c. 14, and asserts, with many other writers, that Pliny's *nitre* is not the *nitre* of the moderns, properly so called, but it is the *natron* of the ancients, viz. the native salt which is found crystallized in Egypt and other hot countries, in sands surrounding lakes of salt water; it must not be mistaken for the natron of the new nomenclature of our College of Physicians, which is the new name of the mineral alkali.

In the plains of Lower Egypt, which was once covered by the sea in the environs of the salt lakes of that country, at Tripoli, at Tunis, as also in the adjacent parts of ancient Carthage, the *natron*, that same *natron* which, under the name of *nitre*, the Carthaginians, according to Pliny, used in preparing their wax, is to this day extracted, and hence it was called *Punic wax*.

I began now (says Lorgna) successively to try my experiments, first with three parts of wax and one of natron, and then with four of wax, and so on till I used twenty parts of white melted wax with one only of natron, with as much water as was just sufficient to melt the natron. I held the mixture in an iron vessel over a slow fire, stirring it gently with a wooden spatula, till the two substances thickened by evaporation, and in closely uniting the mass by degrees assumed the consistence of butter, and the colour of milk. I removed it then from the fire, and put it in the shade to let it harden and to perfect itself in the open air. This natron was extracted from the ley of kali of Malta, evaporated till it was dry; it may also be extracted from the kali of Spain, Sicily, Sardina, and from that of Tunis and of Tripoli, which may be procured without much difficulty. The wax being cooled it liquefied in water, and a milky emulsion resulted from it like that which could be made with the best Venetian soap.

Pliny, in another place, c. 7, l. 23, gives further directions for the manner of using caustic on paintings on walls; but as it concerns the antiquary more than the artist, I have forborne from making the quotation. It begins at these words, *Ut parietis siccato cera Punica*, &c.

As to making use of this wax in painting in encaustic the chevalier says, that magnificent and repeated experiments were made in the apartments of the Count Giovanni Battista Gasola, by the Italian painter Signor Antonio Paccheri. He dissolved the Punic wax, when it was not yet so much hardened as to require to be igni resoluta, as expressed by Pliny, with pure water lightly infused with gum arabic, instead of sarcocolla, male incense, mentioned by Pliny. He afterwards melted and mixed his colours with this wax so liquefied as he would have done with oil, and proceeded to paint in the same manner; nor were the colours seen to run or alter in the least; and the mixture was so flexible that the pencil ran smoother with it than it would have done with oil. The painting being dry, he used the caustic over it, and rubbed it with linen cloths, by which the colours acquired a peculiar vivacity and brightness which they had not before the caustic and the rubbing had been effected.

ENGAGED COLUMNS. *In architecture.* Columns attached to, or built in walls or piers, of which a portion is concealed. There are half and three quarter engaged columns; which, however, lose much of their beauty by such a clumsy attachment.

ENGLISH ARCHITECTURE. *In architecture.* The art of building as practised in England or invented by the English. The former is mostly imitations of the ancients, and the latter rather doubtful. See ARCHITECTURE, GOTHIC, STYLE.

ENGRAVING. The art of depicting by incisions in any matter or substance, but particularly on plates of metal, blocks of wood, hard stones, &c. for the purpose of producing certain impressions from them called prints.

The art of engraving is divided into various branches or classes: as engraving on stones for seals, signets, called *gem sculpture*; die sinking for coins, medals, &c. called *medallurgy*; on *copper-plates* after various manners, as *line engraving*, *etching* or engraving with aqua fortis, *mezzotinto engraving* or *scraping*, *aquatinta engraving*, *stipple dot* or *chalk engraving*, *engraving on wood*, *engraving on steel*, on *stone*, called *lithography*, *etching on glass*, and some other minor branches of the arts. See GEM SCULPTURE, MEDALLURGY, ETCHING.

The most ancient as well as the most legitimate and beautiful mode of practising the art is that which is called line engraving or engraving proper; and is the art of cutting lines upon a copper-plate, by means of a steel instrument called a graver or burin, without the use of aqua fortis. This was the first way of producing copper-plate prints that were practised, and is still much used in historical subjects, portraits, and in finishing landscape. The tools necessary for this art are the graver or burin, of which there are various sorts, a scraper, a burnisher, an oil-stone, a sand bag or cushion for supporting the plate, an oil rubber, and some good charcoal. The graver is an instrument made of tempered steel, of the form of a quadrangular prism, about one tenth of an inch thick, fitted into a short wooden handle. They are square and lozenge-shaped. The first are used in cutting broad strokes, the other for fainter and more delicate lines. In making the incision it is pushed forward by the hand in the direction of the line required. The scraper is a three-edged tool also of steel, about six inches long, having three sharp edges, and is used for rubbing off the burr or barb raised by the graver. The burnisher is about three inches long, and is used for softening or reducing lines that are two deep, or for burnishing out any scratches or holes in the copper: it is formed of hard steel rounded and polished. The oil-stone is for whetting the gravers, etching points, &c. The sand bag or cushion, about nine inches diameter, is for laying the plate upon for the conveniency of turning it in any direction, but is seldom used by artists. The oil rubber and charcoal are for polishing the plate. As great attention is required to whet the graver, particularly the belly of it, care must be taken to lay the two angles of the graver, which are to be held next the plate, flat upon the stone, and to rub them steadily till the belly rises gradually above the plate; otherwise it will dig into the copper, and then it will be impossible to keep a point, or execute the work with freedom. For this purpose the right arm must be kept close to the side, and the forefinger of the left hand placed upon that part of the graver which lies uppermost upon the stone. In order to whet the face the flat part of the handle should be placed in the hollow of the hand, with the belly of the graver upwards, upon a moderate slope, and the extremity rubbed upon the stone till it has an exceedingly sharp point. When the graver is too hard, as may be known by the frequent breaking of the point, it should be tempered by heating a poker red hot, and holding the graver upon it, within half an inch of the point, till the steel changes to a light straw colour; then put the point into oil to cool; or hold the graver close to the flame of a candle till it be of the same colour, and cool it in the tallow. Be not hasty in tempering; for sometimes a little whetting will bring it to a good condition, when it is but a little too hard. To hold the graver cut off that part of the handle which is upon the same line with the belly or sharp edge of the graver, making that side flat, that it may be no obstruction. Hold the handle in the hollow of the hand, and extending your forefinger towards the point, let it rest on the back of the graver, that you may guide it flat and parallel with the plate.

To lay the design upon the plate, after you have polished it fine and smooth, heat it so that it will melt virgin wax, with which rub it thinly and equally over, and let it cool. Then the design which you are about to lay on must be drawn on paper with a black lead pencil, and laid upon the plate with its penciled side upon the wax; then press it, and with a burnisher go over every part of the design, and when you take off the paper you will find all the lines which you drew with the black lead pencil upon the waxed plate, as if it had been drawn on it; then with a sharp pointed tool trace the design through the wax upon the plate, and you may then take off the wax and proceed to work. Let the table or board you work at be firm and steady; upon which place your sand bag with the plate upon it, and, holding the graver as before directed, proceed in the following manner: For straight strokes move the right hand forwards, leaning lightly where the strokes should be fine, and harder where you would have it broader. For circular or crooked strokes hold the graver firmly, moving your hand or the plate as you see convenient. Learn to carry the hand with such dexterity that you may end your stroke as finely as you began it; and if you have occasion to make one part deeper or blacker than another, do it by degrees: and take care that your strokes be not too close nor too wide. In the course of your work scrape off the roughness which arises with your scraper, but be careful not to scratch the plate; and that you may see your work properly as you go on, rub it with the oil rubber, and wipe the plate clean, which takes off the glare of the copper and shows what you have done to advantage. Any

mistakes or scratches in the plate may be rubbed out with the burnisher, and the part levelled with the scraper, polishing it again lightly with the burnisher or charcoal. Having thus attained the use of the graver according to the foregoing rules, you will be able to finish the piece by graving up the several parts, and advancing gradually with the stronger, till the whole is completed. The dry point or needle (so called because not used till the ground is taken off the plate) is principally employed in the extremely light parts of water, sky, drapery, architecture, &c.

After all, in the conduct of the graver and dry point, it is difficult to lay down rules which shall lead to eminence in the art. Every thing seems to depend on the habit, disposition, and genius of the artist. A person cannot expect to excel very much in engraving who is not a good master of design, and he ought to be well acquainted with perspective, the principles of architecture, and anatomy. He will, by these means be able, by proper gradations of strong and faint tints, to throw backward and bring forward the figures, and other objects of his picture or design which he proposes to imitate. To preserve equality and union in his works, the engraver should always sketch out the principal objects of his piece before he undertakes to finish them. In addition to the rules already given, we may observe, that the strokes of the graver should never be crossed too much in the lozenge manner, particularly in the representations of muscles or flesh, because sharp angles produce the unpleasing effect of lattice work, and take from the eye the repose which is agreeable to it in all kinds of picturesque designs. There are exceptions to this rule, as in the case of clouds, the representation of tempests, waves of the sea, the skins of hairy animals, or leaves of trees, in which this method of crossing may be admitted.

In managing the strokes, the actions of the figures, and of all their parts, should be considered, and, as in painting, it should be observed how they advance towards or recede from the eye; and the graver must, of course, be guided according to the risings or the cavities of the muscles or folds, making the strokes wider and fainter in the light, and closer and firmer in the shades; thus the figures will not appear jagged, and the outlines may be formed and terminated without being cut too hard. However, though the strokes break off where the muscle begins, yet they ought always to have a certain connexion with each other, so that the first stroke may often serve, by its return, to make the second, which will show the freedom and taste of the artist. In engraving the muscles of the human figure, the effect may be produced in the lighter parts by what are called long pecks of the gravers, or by round dots, or by dots a little lengthened, or what will be better, by a judicious mixture of these together. With regard to the hair, the engraver should begin his work by laying the principal grounds, and sketching the chief shades with a few strokes, which may be finished with finer and thinner strokes to the extremities. In the representation of architecture, the work ought not to be made too black, because as the edifices are usually constructed with stone, marble, &c. the colour, being reflected on all sides, does not produce dark shade, as is the case of other substances. Where sculpture is to be represented white points must not be put in the pupils of the eyes of the figures, and in engravings after paintings; nor must the hair or beard be represented as in nature, which makes the locks appear flowing in the air, because, as is evident, in sculpture there can be no such appearances.

For engraving a series of parallel lines, which are either all equidistant or approximating towards each other in regular gradation from a great to the most minute distance, such as the blue part of a sky, water, or in plates of machinery, architecture, &c. where a smooth flat tint is required, nothing has yet equalled the ruling machines invented by the late Mr. Lowry about thirty years since. They are thus described by Mr. Landseer, in his Lectures on Engraving delivered at the Royal Institution in 1806, and since published. "The next mode of engraving that solicits our attention is that invented by Mr. Wilson Lowry. It consists of two instruments, one for etching successive lines, either equidistant or in just graduation, from being wide apart to the nearest approximation, *ad infinitum;* and another, more recently constructed, for striking elliptical, parabolical, and hyperbolical curves, and in general all those lines which geometricians call *mechanical curves*, from the dimensions of the point of a needle to an extent of five feet. Both of these inventions combine elegance with utility, and both are of high value, as auxiliaries of the imitative part of engraving; but as the auxiliaries of chymical, agricultural, and mechanical science, they are of incal-

culable advantage. The accuracy of their operation, as far as human sense, aided by the magnifying powers of glasses, enables us to say so, is perfect; and I need not describe the advantages that must result to the whole cycle of science from mathematical accuracy." The whole of Mr. Lowry's works, as well as those of his school, are proofs of the accuracy of these opinions.

Of Mezzotinto Engraving or Scraping.—This art, which is of modern date, is recommended by the ease with which it is executed, especially by those who understand drawing. Mezzotinto prints are those which have no strokes of the graver, but whose lights and shades are blended together, and appear like drawing in India ink. They are different from aquatinta, but as both resemble Indian ink, the difference is more easily perceived than described. Mezzotinto is applied to portraits and historical subjects, and aquatinta is chiefly used for landscape and architecture. The tools necessary for mezzotinto scraping are the grounding tool, burnishers, and scrapers. To lay the mezzotinto ground, lay your plate, with a piece of flannel under it, upon the table, hold the tool in your hand perpendicularly, lean upon it moderately hard, continually rocking your hand in a right line from end to end, till you have wholly covered the plate in one direction; next cross the strokes from side to side, afterwards from corner to corner, working the tool each time all over the plate in every direction, almost like the points of a compass; taking care not to let the tool cut (in one direction) twice in one place. This done, the plate will be full, and would, if it were printed, appear completely black. Having laid the ground, take the scrapings of black chalk, and with a piece of rag rub them over the plate, or the plate may be smoked with candles. Now take the drawing, and having rubbed the back with red chalk-dust mixed with flake white, proceed to trace it on the plate. To form the lights and shadows take a blunt needle and mark the outlines only, then scrape off the lights in every part of the plate as clean and smooth as possible, in proportion to the strength of the lights in your drawing, taking care not to hurt the outlines. The use of the burnisher is to soften the extreme light parts after the scraper is done with; such as the tip of the nose, forehead, linen, &c. which might otherwise, when proved, appear rather misty than clear.

Another method used by mezzotinto scrapers is to etch the outlines of the original, and the folds in drapery, making the breadth of the shadows by dots, which, having bit to a proper depth with aquafortis, they take off the ground used in etching, and having laid the mezzotinto ground, proceed to scrape as above described. When the plate is ready, send it to the copper-plate printer, and get it proved. When the proof is dry, touch it with white chalk where it should be lighter, and with black chalk where it should be darker; and when the print is retouched, proceed as before for the lights; and for the shades use a small grounding tool; prove it again; and so proceed to prove and touch till it is entirely to your mind.

Mr. Robert Lawrie, in the year 1776, proposed to the Society for the Encouragement of Arts, Manufactures, &c. a new method of printing mezzotinto prints in colours, for which he received a premium of thirty guineas. He says he was induced to attempt this method owing to the great expense attending the execution of good engravings, which had more than answered his most sanguine expectations. In this manner animals, plants, &c. for illustrating natural history, may be finished in their proper colours, very much like drawings, and greatly resembling nature. The plates will also admit of being repaired so as to furnish a large impression. The following is an explanation of his method:—

A copper-plate with an etched or engraved outline, dotted next the lights, and filled in with mezzotinto ground, is printed in colours after nature, or from a picture, by the following process: The plate being warmed in the usual manner, the colours are applied by means of stump camel hair pencils to the different parts, as the subject suggests; it is then wiped with a coarse gauze canvass, any other being improper; after this it is wiped clean with the hand, and being again warmed, is passed through the press. The colours are mixed with burnt linseed oil, and those generally used by painters are proper.

The invention of *mezzotinto* engraving is generally attributed to Prince Rupert; but in the Life of Sir Christopher Wren (p. 108), by the author of this Dictionary, it is given to that eminent architect. "The mode of impressing pictures by light and shade on copper, commonly known by the name of engraving in mezzotinto, owes its improvement if not its origin to Wren." The journals of the Royal Society for October 1, 1662, record that Dr. Wren presented some cuts done by himself in a new

way, whereby he could almost as soon do a subject on a plate of brass or copper as another could draw it with a crayon on paper. On this subject the editor of Parentalia speaks with decision, that "he was the first inventor of the art of graving in mezzotinto; which was afterwards prosecuted and improved by his Royal Highness Prince Rupert, in a manner somewhat different, upon the suggestion, as it is said, of the learned John Evelyn, Esq."

Of Engraving in Aquatinta.—Aquatinta is a method of producing prints very much resembling drawings in Indian ink. The principle of the process consists in corroding the copper with aquafortis in such a manner that an impression from it has the appearance of a tint laid on the paper. This is effected by covering the copper with a powder, or some substance which takes a granulated form, so as to prevent the aquafortis from acting where the particles adhere, and by this means cause it to corrode the copper partially, and in the interstices only. When these particles are extremely minute and near to each other, the impression from the plate appears to the naked eye exactly like a wash of Indian ink; but when they are larger, the granulation is more distinct, and as this may be varied at pleasure, it is capable of being adapted with success to a variety of purposes and subjects.

This style of engraving was invented by a French artist of the name of St. Non, who flourished about 1662, and communicated it to Jean Baptiste le Prince, a painter and etcher, who was born at Paris in 1733, and died in 1781, who engraved many plates in this way. It was introduced into England and greatly improved by Paul Sandby. It is not much used at present.

The art of *engraving on wood* is not only of very ancient date, but is a legitimate, beautiful, and artistlike mode of operation, for the production of prints, particularly for books. The first engravers on wood whose names have reached our times are William Pluydenwurff and Michael Wolgemuth, who engraved the cuts of the Nuremburg Chronicle, which was published in folio in 1493, which are marked with all the stiffness and inaccuracy which characterize the works of the German artists of that time.

Albert Durer also practised the art of wood engraving with great success, which began now to assume a higher character; and, as far as regards the executive part, he brought it to a perfection which has hardly been equalled by any succeeding artist.

Bewick of Newcastle, Harvey his pupil, the Thompsons (brothers), Branston, and other living artists, have carried this art to the highest perfection.

Engraving on steel is performed in nearly a similar way to engraving on copper. For etching on steel the plate or block is bedded on glazier's putty, and etched with a needle through a ground of Brunswick black in the common way. Messrs. Perkins and Heath have carried the art of engraving on plates of softened steel, afterwards hardened by a scientific process, to a great degree of perfection.

Engraving on stone is a recent invention now in great vogue. It is cheap and, when well performed, produces impressions of great beauty in imitation of chalk, mezzotinto, pen and ink, and even of etching. See Lithography.

Engraving or etching on glass is performed by laying on a ground consisting of a thin coat of bees wax, and drawing the design therein with an etching needle. It is then to be covered with sulphuric acid, sprinkled over with powdered fluor spar or fluoric acid. It must be taken off after four or five hours, and cleaned with oil of turpentine.

The art of engraving is of great antiquity (see Arts), and was originally only rude delineations expressed by simple outlines, such as are described by Herodotus, as traced upon the shields of the Carians. The importance and utility of this art is acknowledged by every person of taste and knowledge; and its dignity as an art is undoubted. It multiplies the works of other artists and preserves them to posterity; it records the talents of eminent artists by an art which requires equal talent, and scarcely less genius. Bezaleel and Aholiab are mentioned in the book of Genesis as "filled with wisdom of heart to work all manner of work with the graver." The hieroglyphics of the Egyptians are also a species of engraving, of which there are many fine specimens in the British Museum. Among the Etruscan antiquities in the same collection are two specimens of the art of engraving at a very remote period; a representation of which forms the frontispiece to one of the volumes of Strutt's *Dictionary of Engravers*.

The engraving of seals or signets is also very ancient, and was practised by most nations of antiquity. See Dactyliotheca.

The art of engraving in this country, like the practice in every other country, commenced and increased with civilization and knowledge. Under Alfred the Great the art met with great encouragement, and

remains of the art as practised in his days are still in existence. There is still preserved in the Museum at Oxford a valuable jewel of this period representing St. Cuthbert, the back of which is ornamented with foliage very skilfully engraved.

The principal engravers in the line manner, taken chronologically, are *Martin* SCHOENGAUER or SCHOEN, born at Colmar about 1455, and died there in 1499: His principal works are religious subjects from his own designs; *Tommaso* or *Mazo* FINIGUERRA, born at Florence in 1418, and died there in 1500; *Israhel* VON MECHELN or MECKEN, born at Meckenen on the Meuse about the year 1450, and died 1523; *Bacio* BALDINI and *Sandro* BOTICELLO, called Filipepi, painter and engraver, born at Florence in 1437, died in 1515. To these two artists are attributed the first certain engravings after the Italian masters. In the cabinet of M. Paignon Dijonval at Paris were nine fine prints by the latter. They are in the style of Andrea Mantegna; *Michel* WOHLGEMUTH, died in 1519; *Albert* DURER or *Albrecht* THURER, born at Nuremburg in 1471, died in 1528: the number of line engravings by this great artist amount to nearly a hundred, and are among the choicest specimens of the art; *Albert* ALTDORFER, born at Altdorfer in Bavaria about the year 1488, and died at Ratisbon in 1538: His engravings are mostly after his own pictures; *Andrea* MANTEGNA, painter and line engraver, born at Padua in 1431, died Sept. 15, 1517; *Marc Antoine* RAYMONDI, about 1527, who engraved after Michel Angiolo, Raffaelle, Mazzuoli, Raibolini, and other eminent Italian masters; *Agostino* VENEZIANO, surnamed de Musis, about 1620, who engraved after Michel Angiolo, Raffaelle, all of which are dated. He was reckoned one of the first engravers in France, and inscribed his works A. Venetien; *Nicolas Belin da* MODENA and *Giov. Ghisi* MONTOVANTO, who flourished about 1530; *Luc* DAMESZ, died in 1533; *Giov. Giac.* CARAGLIO and *Marco* DA RAVENNA, about 1540; *Giul.* BONASONE, born at Bologna in 1498, died at Rome in 1564; He engraved many excellent plates after Michel Angiolo, particularly the last judgment, Pontormo, Raffaelle, Giulio Romano, Caravaggio, Mazzuoli, and Titian. *Eneas* VICUS, *George* VENS, *Henrid* ALDEGRAF, and *Jean Sebast.* BŒHM, about 1550; *Adrian, Charles, William,* and *John* COLLÆRT, Adrian the father was born at Antwerp in 1520, and designed and engraved many excellent plates after his own designs, as well as from the works of De Vos, Stradan, Rubens, Wattelet; *Adam* and *George* GHISI, the latter born at Mantua in 1516; *Lambert* SUTERMANN, *Fagivoli* FRANCO, and *Virgilius* SOLIS, about 1560; *Corneille* COST and *Martin* ROTA, about 1569, the latter born at Sevenigo in Dalmatia, engraved the Last Judgment after Michel Angiolo in 1569, and other excellent performances; *Giov. B.* CAVALARIS, about 1574, engraved the Adoration of the Shepherds after Bronzino in 1565, a large plate of the Miracle of the Loaves after Raffaelle, and other fine works; *Steph.* DE LAURIE, born at Orleans in 1510, and died at Strasburg in 1590: He engraved numerous fine plates; *Jerome* BANG, *Paul* FLYNT, and *Ger.* JODE, about 1596; *Conrad* JODE and *Jean* SADELER, who engraved many plates after Albert Durer, Heintz, de Vos, Spranger, &c. died in 1600; *François* ASPRUCK, about 1601; *Agost.* CARACCI, whose numerous prints embellish the finest collection, was born at Bologna in 1558, and died in 1602; *Jean* SAENREDAM, born at Leyden in 1570, and died in 1607, engraved many fine plates after Caravaggio, Baroccio, Van Mander, Cornelius Bloemart, &c.; *Nicolas* DE BRUYN, about 1610; *Philippe* GALLE died in 1612; *Daniel* KELLERTHALER, about 1613; *Cherubino Borghesiano* ALBERTI, born in 1552, died in 1615, was a fine engraver and painter of the Roman school, who engraved many works after his own designs; nine of Michel Angiolo's pictures in the Capella Sistina; St. Jerome in the Desert after the same great master; many after Raffaelle, also after Baroccio, Vanni, and other masters of the Italian school; *Henri* GOLTZIUS, a celebrated line engraver, painter, and engraver on wood, born at Mulbrecht in 1588, died at Haerlem in 1617: he engraved a numerous collection after his own designs, the works of Raffaelle, Palma, Stradan, Spranger, and a great number of portraits of illustrious characters; *Theodore* GALLE about 1620; *Ambroise* BONVICINO about 1622; *François* VILLAMENA, born at Assisi in 1566, died at Rome in 1626: engraved many fine plates after his own designs, after Raffaelle, Baroccio, Fensoni, Lanfranc, Albano, Muziano, Veronese, and other eminent Italian masters; *Henri* DE GOUDT, born at Utrecht in 1585, died in 1630: he was a painter as well, and engraved his own designs, some from Elsheimer, &c.; *Pierre* LASTMAN, a painter of the Dutch school, born at Haerlem in 1562, and engraved several plates after Rembrant, was the first who attempted, in 1626, the union of colour to his prints, but

with very little success; *Robert* VAN VOERST about 1628, who, among other portraits, engraved one of Sir Kenelm Digby, for Overton the publisher; *Gilles* SADELER about 1629: an engraver of several plates after Albert Durer, Heintz, De Vos, Spranger, and other masters of the Flemish school; *Crisp.* DE PAAS, *Schelte a* BOLSWERT, *Paul* PONTIUS, known by the number and excellence of his works; *Lucas* VORSTERMANN, and *Pierre* DE BALLIN, about 1630; *Jacques* MATHAM, died in 1631; *Pierre* JADE, died in 1634; *Luc.* KILIAN, died in 1637; *Abraham* BLŒMART, born at Gorcum in 1567, died in 1647; *John* PAYNE, who died in 1648, is accounted the first Englishman who engraved in the line manner; he executed several portraits after Mytens, and other Flemish portrait painters; *Giuseppe* ZARLATI, *Jean Frédéric* GREUTHER, who distinguished himself by engraving after the Florentine masters; *Girol* ROSSI, *Conrad* MARINUS, *Jacques* NEEFS, *Pierre* NOLPE, *Henri* SNYERS, who engraved much after Rubens; *Conrad* DE DALEN, *Conrad* CAUKERKEN, *Pierre* CLOUET, and *Pierre* JODE, about 1650; *Fr.* SNEYDERS, died in 1657; *Giuseppi Battista* GALLESTRUZZI, a painter and engraver, born at Florence 1618; *Jacq.* BELLANGE, *Pierre* DE BLEEK, and *Pierre* LOMBARD, about 1660; *Conrad* MEYSSENS, about 1662; *Théodore* MATHAM, about 1663; *Michel* L'ASNE, died in 1667; *John* UMBACH and *Michel* NATALIS, about 1670; *Et.* BAUDET, who engraved many of the pictures of the Caracci, Albano, Poussin, Mignard, Bourdon, &c. flourished about 1664; *Nic.* PITHAU, died in 1671; *Jean* L'ENFANT, died in 1678; *Charles* AUDRAN, died in 1671; *Robert* NANTEUIL, died in 1678; *Reg.* ZEEMANN, *Daniel* DANCKERT's, *J.* MUNICHUYSEN, *Elias* HAINZELMANN, and *Anton.* BLOOTERLING, about 1680; *Fr.* SPIERRE, died in 1681; *Guillaume* CHATEAU, died in 1683; *Conrad* BLŒMERT, about 1686; *Guillaume* ROUSSELET, died in 1686; *Cl.* MELAN, died in 1688; *Corn.* DE VISSCHER, about 1690; *Philippe* KILIAN, died in 1696; *Conrad* MEYER, died in 1698; *Antoine* MASSON, died in 1700; *Gérard* AUDRAN, a most able artist and celebrated engraver, died in 1703; *Gérard* EDELINCK, born at Antwerp in 1627, died at Paris in 1707; *Antoine* TROUVEAU, about 1707; *Conrad* VERMEULEN, about 1707; *Jean Baptiste* NOLLIN, about 1710; *Louis* AUDRAN, died in 1712; *Jean Jacques* THURNEISER, died in 1718; *Jean Ulric* KRUNS, died in 1719; *Philippe* THOMASSIN, about 1720; *Michel* DOSSIER, about 1720; *Etienne* PICART, *Ben* AUDRAN, died in 1721; *Jean Henri* TISCHBEIN the elder and *Jean Louis* ABERLI, about 1722; *Et.* DESROCHERS, about 1723; *Arn.* WESTERHOUT, died in 1725; *Louis* SIMONEAU, died in 1727; *Charles* SIMONEAU and *Jean Bapt.* POILLY, died in 1728; *Franç.* CHEREAU, *Martin* BERNIGEROTH, and *Bernard* PICART, 1735; *Jean Henri* STÆRKLIN, died in 1736, who was peculiarly celebrated for engraving in miniature; his son, *Jean Rodolphe*, died in 1756, who followed his father to a still higher degree of perfection; *Jean* GŒRNE, died in 1738; *Louis* DESPLACES, died in 1739; *Henri Simon* THOMASSIN, about 1741; *Jacques Christophe* LE BLOND, died in 1741; *Charles* DUPINS, died in 1742; *Robert* AUDENAERT, died in 1743; *Giovanni* CANOSSA, died in 1747; *Jean Guillaume* WOLFGANG, died in 1748; *Nicolas Henri* TARDIEU, died in 1749; *Pierre* DREVET, the father and his son, who both died in 1749; *Jean* ADMIRAL, *Jacques* ALIAMET, *Laurent* CARS, *Et.* FESSARD, *Jean Jacques* FLIPART, *Th.* MAJOR, and *Jean* OUVRIER, about 1750; *Jacq. André* FRIEDERICK, died in 1751; *Jacques* FREY, died in 1752; *Gaspard* DUCHANGE, died in 1754; *Georges Martin* PREISSLER, died in 1754; *Nicolas* DE LARMESSIN, *Bart.* CRIVELLARI, about 1755; *Jean* AUDRAN, died 1756; *Philippe André* KILIAN, died in 1759; *J. Ph.* LE BAS, died in 1760; *Jean Michel* LIOTARD and *Jean Adam* SCHWEICKART, about 1760; *Jérémie Jacques* SEDELMAYER, died in 1761; *Louis* SERUGUE, died in 1762; *Jean* DAULLE, died in 1763; *Nicolas* BEAUVAIS, died in 1763; *Jean Jacques* BALECHOU, died in 1764; *Antoine* FALDONI, died in 1765; *Conrad* PLOOS VAN AMSTEL, born at Amsterdam in 1732, and was the inventor of the art of imitation of all sorts of drawings, coloured or plain, to a great perfection. He engraved many imitations of the drawings of Wouverman, Sachtleven, Van Dyck, Ostade, Mieris, Goltzius, Van Goyen, Brauwer, &c.; *Gustave André* WOLFGANG, *Jérôme* SPERLING, and *Cl.* DREVIT, about 1766; *Jean M.* BERNIGEROTH, *Marc* PITTERI, and *Jean Elie* RIEDINGER, born at Ulm, died at Augsburg in 1767; a very eminent painter and engraver of animals and landscapes; *Chrétien Frédéric* BOETHIUS, about 1764; *Lor.* ZUCHI, about 1768; *Jean Ch.* FRANCOIS, died in 1769; *Jean El.* NILSON, about 1769; *Jacques* HOUBRAIKEN, born at Dordrecht in 1698, died in 1780; one of the finest engravers of portraits that ever lived; *Jean* SAVANT, in 1770; *François* BASAN, *A. B.* BARBAZAN, *Jean* BARRY, *Francesco* BARTOLOZZI, born at Florence in 1730, died in London 1807; one of the first engravers who practised

the art of stipple or chalk engraving with any success. His works are very numerous, and are distinguished by delicacy and taste rather than force.

Among other eminent artists who practised this art are Jonathan Spilsbury, who engraved several of Angelica Kauffmann's works; W. Ryland, Rob. Menageot, G. F. Schmidt, Just. Preissler, Dan. Berger, C. Feller, P. W. Tomkins, Bichard, J. R. Smith, W. Dickinson, the two Facius's, J. Parker, Caroline Watson, H. Kingsbury, R. Macuard, T. Burke, G. Ward, G. P. Carey, Saillier, G. Sharp, V. M. Picot, Bettilini, P. Simon, Howard, G. Wilkinson, N. Pollard, C. Tomkins, Madame Prestel, J. M. Delatre, G. Graham, H. Sinzenich, Schiavonetti, &c. J. F. Bause, Jean Beauvarlet, Beavit, Salv. Carmona, G. Catini, G. B. Cecchini, Chevillet, Clemens, R. Cooper, Dom. Cunego, Nic. De Launay, William Ellis, Et. Figuel, Fab. Gautier, Dagoty, Pierre de Geust, Jacques Gilberg, Jean Hall, Antoine Hemery, Martin, Jan. Massin, Arch. Macduff, Massard, Chr. De Mechelen, P. E. Moitte, J. G. Müller, Et. Mulinari, J. Mart Preissler, Reinier, André Rossi, F. Selma, Jacq. Schmutzer, Rob. Strange, J. K. Sherwin, Jacq. Nicolas Tardieu, Porporati, Sim. Fres. Ravenet, Giov. Volpato, Rosaspina, Henri Vinkeles, Josué Wagner, Jean Georges Wille, William Woollet, Raffaelle Morghen, Pierre Ducros, Pierre Paul Montagniti, several members of the family of Haid, Jean Etienne and Jean Michel Liotard, Unger, the father and son, Daniel Chodoweicki, the two Brands, the two Crusiuss, Jean Guillaume Meil, Salomon Gessner, three Hackerts, Christian Gotslieb Geyser, Carle and Henri Guttenberg, Angelica Kauffmann, Stoelzel, Clement Kohl, Adam Bartsch, Schlotterbeck, Jean Henri Lips, Schubert, Schnorr, Boettcher, Durmer, Pfeiffer, Wrenk, Pichler, Geiger, &c. &c.

Among eminent English engravers are Robert Walker, born in Somersetshire in 1572, who engraved in aquafortis and mezzotinto; William Faithorne, born in London in 1620, and died in 1691, an excellent engraver of portraits; Robert White, born in 1645, died in 1704, portraits; J. Beckett, born in Kent in 1653, landscape, portrait, and history; John Smith, the celebrated mezzotinto engraver, born in London in 1654, and died in the same city in 1722, of whose numerous and excellent works the cabinet of M. Paignon Dijonval at Paris alone contained nearly thirteen hundred; John Faber, born 1684, died 1756, also an eminent engraver in mezzotinto; William Hogarth, born in London in 1698, died in 1764, line engraver of his own inimitable works; Arthur Pond, engraver in aquafortis, born in 1700, died about 1758; Thomas Worlidge, celebrated for the delicacy and effect of his etchings, in the manner of Rembrandt, born at Peterborough in 1700, died at Hammersmith in 1766; Francis Hayman, better known as a painter; James Mac Ardell, mezzotinto, born in Ireland about 1720, died in London in 1765; Thomas Smith of Chichester, and his brothers John and George, landscapes; they were also painters. Captain William Bailly, aquafortis; Richard Houston, born in 1728, died in 1775, mezzotinto; John Greenwood, born at Boston about 1730, died about 1770, chalk and mezzotinto; William Wynn Ryland, born at London in 1732, died there in 1783, line and chalk; William Woollett, born at Maidstone 1735, died in London 1785, one of the most eminent line engravers that ever lived; Richard Brookshaw, born 1736, and practised much in France, where he engraved, in mezzotinto, Louis XVI. as dauphin, and as king with Maria Antoinelle in 1775, and other French portraits; John Dixon, born about 1740, mezzotinto; John Hall, born about 1740, line engraving; John Raphael Smith, born in London 1740, very eminent in mezzotinto, and a good portrait painter in crayons; John Keyse Sherwin, born about 1746, chalk; Paul Sandby, R. A. a landscape painter, and very eminent in aquafortis and aquatinta; Robert Pollard, died in 1748, aquatinta; John Boydell, born in 1719, and died an alderman of London in 1804, line; Josiah Boydell, his nephew, also an alderman of London, line; William Dickenson, born about 1750, mezzotinto and chalk; James Gilray, line, and peculiarly celebrated as the most eminent caricaturist of his day; James Fittler, born in London in 1753, eminent as a line engraver; William Ward, born about 1750, mezzotinto; J. Plimmer, who practised about 1760, aquafortis; Thomas Rowlett, aquafortis, about 1760; Robert Dodd, aquafortis and aquatinta, about 1770; Robert Thew, aquafortis and chalk, about 1786; The names of Vertue, Strange, Woollett, Byrne, Middiman, Milton, Sharpe, Lowry, and other eminent engravers of the English school are known and honoured wherever the arts are cultivated or understood.

Engraving on wood is a very artistlike mode of execution, and requires considerable graphic abilities to execute it well. Hence many painters of excellence have

practised it with success. Among the best engravers on wood we must particularly mention Pierre Schæffer or Schoifer, whose coloured figures in his celebrated Psalter (fol. 1457) prove that this mode of engraving, the invention of which is commonly attributed to Hugo Da Capri, had its rise in Germany. It is very probable that Martin Schœn, Michel Wolgemuth, and Guillaume Plydenwurfe engraved on wood about the middle and at the end of the fifteenth century. The first artist in this line who can be mentioned with certainty is Jean Schnitzer, who wrought about 1480. Phillery, who lived near the end of the fifteenth century, is the first engraver on wood who practised in the Netherlands. Among other eminent wood engravers are Ad. Gampertin, about 1490; Rigm. Philesius, about 1508; Math. Grunwald, died in 1510; Hugo Da Carpi, about 1510; Albert Altdorfer, about 1511; Agostino Veneziano de Musis, about 1514; Jean Balding, in 1516; Jean Burgmayer, died in 1517; Albert Durer, died in 1528; of whose works the Baron de Heinechen has given a complete catalogue; Albert Glockenthon, in 1510; Jean Guldenmund, about 1526; Antoine Da Trento, in 1530; Balthazar Peruzzi, died in 1536; Henri Vogtherr, died in 1537; Jean Springinklee, died in 1540; Jean Brosshammer, in 1542; Rodolphe Speckle, in 1543; Jean Kulenback, died in 1545; Daniel Beccafumi, died in 1549; George Pens, died in 1550; Jean Schæufflin, died in 1550; Pierre Gatin, about 1550; Erhardt Schœen, about 1550; Jean Sébastien Bœhm, about 1550; the brothers Hopfer; Henri Aldegraf, about 1551; Conrad Gessner, about 1550, who engraved natural history, marked his works with the word Fo; Lucas Van Leyden, died in 1553; Jérôme Resch, died in 1556; Jean Bochsbergen, about 1560; Gietleughen De Courtray, about 1550; Jacques Kerver, about 1560; Virg. Solis, died in 1562; Sigfried Feyerabendt, about 1569; of which name and family were many engravers; S. Vichem, about 1570; Christophe Chrieger, in 1572; Christophe Sichem, in 1573; O. Goujeon, in 1575; Salomon Bernhard, in 1580; Dupont, in 1583; Itrenze, about 1585; Luc. Muller de Cranach, died in 1586; Jean Rogel, about 1588; Laon. Norsino, in 1590; Christophe Stimmer, in 1590; Marc Claseri, in 1590; Jost. Aman, died in 1591; Jacques Zuberlin, about 1595; Christophe Coriolan, in 1600; André Andriani, died in 1623; Gio. Georg. Nivolstella, died in 1624; Barthélemi and Jean Baptiste Coriolan, about 1630; Christophe Jegher, 1637; Etienne Du Val, in 1650; Pierre le Sueur the elder, in 1698; the two Papillons, died in 1710, and 1724; Pierre le Sueur, jun. died in 1716; Gonzalez van Hayden, died in 1720; Kerkhal, about 1720; El. Porcelius, died in 1722; Vincent le Sueur, died in 1743; Jean Baptiste Jackson, about 1745; Giuseppe Maria Moretti, died in 1746; Giovanni Battista Canossa, died in 1747; Maurice Roger, about 1747; Pierre le Sueur, died in 1750; Nicolas le Sueur, died in 1764; Elis le Sueur, in 1765; Antoine Marie Zanetti, who died in 1767, endeavoured to revive the peculiar manner of Hugo Da Carpi; Nicolas Caron, Jean Baptiste Papillon, the two M. M. Unger, Beugnet, Dugoure, &c.

The principal English engravers on wood are mentioned in the early part of this article.

The limits of a general Dictionary of the fine arts cannot possibly find room for all that is necessary to be said upon so important an art as engraving. The reader is therefore referred to the article ENGRAVING in Dr. REES's Cyclopedia, written, we believe, by that eminent line engraver Mr. LANDSEER; to his Lectures on Engraving, 8vo. London, 1806; to the article ENGRAVING in Dr. BREWSTER's *Edinburgh Encyclopædia*, and the same word in the *Encyclopædia Metropolitana;* STRUTT's *Dictionary of Engravers;* BRYAN's *Dictionary of Painters and Engravers;* MEADOW's *Lectures on Engraving*, London, 8vo, 1811.

Of the earlier writers are FELIBIEN's *Principes de l'Architecture et des autres Arts, qui y dépendent. Idée de la Gravure, par* M. MARCENAY DEGHUY, Paris, 8vo. 1756; HEINEKEN *Idée generale d'une Collection complète d'Estampes;* CHRIST, *Dictionnaire des Monogrammes;* PAPILLON, *Histoire de la Gravure en Bois.*

In English, *Sculptura;* or, *the History and Art of Chalcography and Engraving in Copper*, by JOHN EVELYN, London, 12mo. 1663, 8vo. 1755; *The Art of Engraving and Etching, with the way of printing Copper-plates*, by M. FAITHORNE, Lond. 1702; *Sculptura historico-technico; or, the History and Art of Engraving, extracted from* BALDINUCCI, FLORENT, LE COMPTE, FAITHORNE, *the Abecedario Pittorico*, and other authors, Lond. 4to. 1747, 1766, and 1770; *An Essay upon Prints, containing Remarks upon the Principles of Picturesque Beauty, the different kind of Prints, and the Characters of the most noted Masters; illustrated by Criticism upon particular pieces: to which are added some Cautions that may be useful in collecting Prints*, by GILPIN, London, 8vo. 1767, 1768, and 1781.

Among the Dutch writers the principal is GERARD LAIRESSE, who, in the thirteenth book of his *Grand Livres des Peintres*, has treated of the art of engraving with great ability.

Of German writers on engraving may be cited the seventh section of the second part of the work of KŒREMON, entitled *De la Nature et de l'Art.* The twelfth section of the second part of the first volume of the work of M. PRANGEN, which is entitled *Essai sur la Formation d'une Académie des Beaux Arts.* The work called *Sur l'Etude de la Gravure*, par LOUIS FRONHOFER, which is printed in the *Mémoires de l'Académie de Bavière*, Munich, 8vo. 1781.

Among the theoretical works on this art worth consulting must be numbered *le Dictionnaire de Chiffres, et de Lettres ornées à l'usage de tous les Artistes, contenant les vingt-quatre Lettres de l'Alphabet, combinées de manière à y rencontrer tous les noms et surnoms entrelacés*, par M. POUGET, Paris, 1766; *Le Pastel en Gravure, inventé et exécuté* par LOUIS BONET, *composé de huit épreuves qui indiquent les différens degrés*, Paris, 8vo. 1769; *Nouvelle Manière de faire des Gravures de différentes Couleurs, à la manière du Dessin*, par J. J. BYLAERT.

On aquatinta, or prints in imitation of washed drawings, *L'Art de Graver au Pinceau; nouvelle Méthode plus prompte qu'aucune de celles qui sont en usage, qu'on peut exécuter facilement sans avoir l'Habitude du Burin, ni de la Pointe, mise au jour* par M. STAPART, 12mo. Paris, 1773. This work is translated into German by HAREMPETER, Nuremburg, 1780. BOSSE has also given a section of his work to the same subject.

Upon the history of engraving the student may consult with profit, *Comminciamento e Progresso dell' Arte d'intagliar in rame*, da FILIPPO BALDINUCCI, Firenze, 4to. 1686; with the Supplements of DOM. MARIA MANNI, Firenze, 1761; *Abrégé Historique de l'Origine et des Progrès de la Gravure, et des Estampes en Bois et en Taille-douce*, par le Major HUMBERT, Berlin, 8vo. 1752; *Histoire de la Gravure, jusqu'au temps d'Albert Durer*, printed in the tenth volume of the *Journal des Arts de* M. DE MUZZ. Also a dissertation in the twenty-fifth volume of *La Nouvelle Bibliothèque des Belles Lettres, sur l'Histoire de la Gravure en Allemagne, depuis son invention jusqu'à l'an* 1500; *Essai d'une Histoire de la Gravure, depuis sa première origine, suivi de celle des Progrès de cet Art, dans les Nouvelles des Arts et des Artistes*, p. 276. See ARTS, MEZZOTINTO, MONOGRAM, LITHOGRAPHY, SCHOOLS, PRINTS, &c.

ENTABLATURE. [from *tabulatum*, Lat. or *table, entablement*, Fr.] *In architecture.* The horizontal part of an order that is supported by the column, and consists of the *cornice, frieze*, and *architrave*, which differ in all the orders. See ORDER, CAPITAL, COLUMN, CORNICE, ARCHITRAVE, FRIEZE.

ENTASIS. [Ἔντασις, Gr.] *In architecture.* The slightly curved line that forms the outline of the shaft of a column, which is so beautifully graceful in the Grecian Dorics as to be just suspected and scarcely sensible. Were these profiles conical, they would appear hollow in their outlines and fragile; and when too gibbous or swoln like the Tuscan and some bad examples of the Romans and modern Italians, like a bursting barrel, that had lost all its hoops but the top and bottom, or, as Sir Henry Wotton observes, "as if they were sick of some tympany or dropsy." This contraction or comely diminution is to be found in all the best Greek examples, although many draughtsmen have represented them as being straight from the apoplyge to the colarino; as Vitruvius (lib. iii. cap. 2) directs, "De adjectione, quæ adjicitur in mediis columnis, quæ apud Græcos Ἔντασις appellatur, in extremo libro erit formatio ejus." See DIMINUTION.

EPHEBEIUM. [Lat. Ἐφηβεῖον, Gr.] *In ancient architecture.* From Ἔφηβος a youth, a lad. A building wherein youths or striplings wrestled and exercised till they arrived at manhood, and capable of entering the Gymnaseium. Vitruvius and Palladio both describe the details and manner of constructing *Ephebeii.*

EPHESUS. [Lat. Ἔφεσος, Gr. from ἔφεσις permission, because Hercules permitted the Amazons to found it.] *In the history of ancient architecture.* A celebrated city of Ionia, and once the metropolis of Asia Minor, is affirmed by Pliny, Justin, and Orosius to have been built by an Amazon, whose name also it is supposed to bear. It was then possessed by the Carians and Leleges; but was occupied by Androclus, the son of Codrus, King of Athens, who conducted the first colony of Ionians into Asia. The city is celebrated for the temple of Diana, one of the seven wonders of the world, and other splendid works in architecture and sculpture. See DIANA. It was known in ancient times by a variety of names, as Arsinoë, after the wife of Lysimachus, Alopes, Ortigia, Morges, Smyrna, Trachæa, Samornion, and Pleta;

and is described by ancient geographers as at once the ornament of Asia, and the most frequented emporium of that continent. Its citizens, in addition to their mercantile eminence, were liberal patrons of the fine arts, and their temples possessed many of the most celebrated productions of ancient genius. Their architecture was conducted principally by Pharax, whom Vitruvius mentions with much commendation. Agasius, the son of Dosotheus, was one of the most eminent sculptors. Parrhasius, Apelles, and Ephorus (the master of the latter), all holding the first rank as painters, were natives of Ephesus.

But the great boast of the Ephesians, and the principal ornament of their city was the celebrated temple of their tutelary goddess Diana. The original object of their worship was a small statue of elm or ebony, made by one Canitias, though commonly believed in those days to have been sent down from heaven by Jupiter; but what is more remarkable, it had no resemblance to the elegant huntress Diana, and was merely an Egyptian hieroglyphic with many breasts representing the goddess of Nature. As the original figure became decayed by extreme age, it was propped by two rods of iron like spits, which, even after its renewal, were religiously adopted in the substitute. It was at first placed upon a block of beach or elm wood, but in later times was preserved in a shrine adorned with all that wealth and genius could contribute. As the veneration for the goddess increased among the inhabitants of Asia, a magnificent temple was constructed on the spot where the elm had stood, and the sacred image placed within it. This temple seems to have been several times (Pliny says seven times, lib. xvi. c. 40) ruined and rebuilt, a circumstance which occurs in ancient writers, as to the dates and descriptions of these successive erections. One of them is expressly affirmed by Livy (lib. i. c. 45) to have been completed in the reign of Servius Tullius, who flourished at the latest 570 years before Christ. Another is described which was originally designed by Ctesiphon, a Cnossian architect, 541 years before the Christian era, whose plan was continued by Demetrius, a priest of Diana, and the whole at length completed by Daphnis of Miletus, and a citizen of Ephesus. This temple is said to have been partially destroyed by fire on the day when Socrates was poisoned, 400 years B. C. and 356 B. C. by the philosopher Herostratus, on the day when Alexander the Great was born, Diana, says Timæus the historian, being then absent at the delivery of Olympias. The incendiary confessed, upon being put to the torture, that his only motive for the sacrilegious act was a desire to immortalize his name; and though an assembly of the Ionian states passed a decree condemning his name to oblivion, the prohibition served only the more to perpetuate its remembrance.

There were also in Ephesus many other temples of the Ionic order; whereof two, one dedicated to Apollo, the other to Bacchus, were the most remarkable. When Cyrus, having subjugated Asia and plundered Ephesus, demolished all their temples, he spared that of Diana, whose astonishing beauty served as a bulwark against the rage and fury of that mighty conqueror: but what he spared time, neglect, and the ravages of the Turks in 1300 completed. So that the temple of Diana, one of the seven wonders of the world, and those of Bacchus and Apollo with all their glories, the silver shrine and the statue that came down from heaven are desolate and no more to be seen. See DIANEIUM. Also the article EPHESUS in Dr. BREWSTER'S *Edinburgh Encyclopædia* for more general historical information; ANACHARSIS' *Travels*, vol. vi. p. 188; VITRUVIUS, lib. viii.; PLINY, *Nat. Hist.* l. xvi. c. 40, and l. xxxvi. c. 14; STRABO, lib. xiv; Dr. POCOCKE'S *Travels*; SANDY'S *Travels*; *Voyage Pittoresque de la Grèce*; Rev. J. DALLAWAY'S *Constantinople*, pp. 209, 211.

EPICRANITIS. [Ἐπικρανιτις, Gr. from ἐπικραίνω, I finish or perfect.] *In ancient architecture.* Epicranitides are tiles forming the cyma or top bed of the cornice belonging to the pediments of Grecian temples. The angular stone that formed the vertex of the fastigium or pediment was called the angular epicranitis. The word occurs in the celebrated Athenian inscription brought to England by Dr. Chandler, and deposited in the British Museum. See Dr. CHANDLER'S *Inscriptiones antiquæ*, p. 11, No. 1. The Chevalier E. Q. VISCONTI'S memoir upon the same in the 4th volume of his *Museo Pio Clementino*, p. 89. WILKINS'S *Atheniensia*, p. 197. STUART'S *Antiquities of Athens*, vol. ii.

EPIGRAPH. [*epigraphe*, Lat. Ἐπιγραφή, Gr.] *In architecture and sculpture.* An inscription or title denoting the use or destination of the monument inscribed. Independently of the utility of epigraphs if they are ingeniously devised, they may be made as ornamental to the work as foliage, frets, or arabesques. See INSCRIPTION.

EPISCENIUM or EPISCENOS. [Lat. Vitr. l. vii. c. 5, l. v. c. 8. Ἐπισκήνιον, Gr.] *In ancient architecture.* The upper part of the scene in ancient theatres. As the scene had sometimes three tiers of orders, the episcenium was formed of the upper order, with sometimes an attic or some other similar finish.

EPISTYLE. [*epistylium*, Lat. Ἐπιστύλιον, Gr.] *In ancient architecture.* That member or division of the entablature which lies immediately upon the abacus of the capital, and by some ancient writers is used for the abacus itself. The architrave of an order. The word occurs in Vitruvius and also in the highly interesting inscription in the British Museum, relating to the survey of the Erectheium, brought to England by Dr. Chandler. See ARCHITRAVE.

EPITAPH. [*epitaphium*, Lat. Ἐπιτάφιον, Gr.] *In architecture and sculpture.* An inscription engraved on a tomb, mausoleum, sarcophagus, cenotaph, or other funereal monument intended to preserve the memory of the deceased, and to inform posterity of those actions which embellished their lives.

EPOCH. [*epocha*, Lat. Ἐποχή, Gr.] *In the history of the arts.* A solemn date or beginning of a period whence a new computation is begun. In art, Winckelmann is the first writer who sought to distinguish its history into epochs, derived from the classical writers and antique monuments. Upon English art Mr. PRINCE HOARE, secretary for foreign correspondence in the Royal Academy of London, has published a very interesting book called *Epochs of the Arts*, London, 8vo. 1813. See ARTS, ARCHITECTURE, EGYPT, PAINTING, SCULPTURE, &c.

EPOIEI. [Ἐποίει, Gr.] *In ancient art.* A word added by Greek artists to their works after their names equivalent to the Latin word *fecit*, so much used in the present day, and with the same meaning.

EQUESTRIAN STATUE. [from *equestris*, Lat.] *In sculpture.* The statue of a man on horseback. Pliny, in the beginning of the thirty-fourth book of his Natural History, attributes the invention of equestrian statues to the Greeks, and if their success in single and isolated figures was equal to those in their alti rilievi of the metopes of the Parthenon, they must have surpassed all succeeding ages. The Greeks erected equestrian statues, says Pliny, in honour of those who obtained the prizes at their public games, in the horse races, or with chariots.

The Romans adopted equestrian statues in their commemorative statues very early. Pliny (l. xxxiv. c. 36, n. 16 and 17) relates that one was erected in front of the temple of Jupiter Stator to Clælia, who, on being given as a hostage to Porsenna, escaped across the Tiber on horseback. He also mentions one in memory of Horatius Cocles. "Pedestres," says he, "sine dubio Romæ fuêre in auctoritate longe tempore. Equestrium tamen origo perquam vetus est, cum feminis etiam honore communicato. Clæliæ enim statua est Equestris. Hanc primam, et Horatii Coclitis publicè dicatam erediderim."

The situations chosen by the Romans for their equestrian statues were the Forums and other grand and public places of Rome. Julius Cæsar erected one in his own forum to himself, that was of the workmanship of Lisyppus, who made it for Alexander the Great; but Cæsar appropriated it to himself by taking off the head at the shoulders and substituting a head of himself; which change gave rise to the following verses of Statius, L. i. *Sylv. in equo Max. Domitian:*

> "Cædat equus, Latiæ qui contra templa Diones
> Cæsarei stat sede Fori, quem tradere es ausus
> Pellæo, Lisyppe, duci: mox Cæsaris ora
> Aurata cervice tulit."

Among other celebrated equestrian statues of the Romans were those of Castor and Pollux, of the Emperor Domitian, also described by Statius; that of Trajan in the middle of his forum, so much admired by Constantine, that he desired to have one of himself as fine, but Hormisdas, a Parthian prince, who was with him, replied, "Ante imperator stabulum tale condi jubeto, si vales;" that before he procured so fine a horse he should erect an equally fine stable for his reception. Those of Marcus Aurelius, of Antoninus Pius, of Alexander Severus, and many others of which we have now only the records. There was also a fine equestrian statue in marble of Nonnius Balbus.

Of modern equestrian statues the most celebrated are that of Henry IV. of France, on the Pont Neuf at Paris, by John of Bologna, that of Louis XIII. in the Place Royale by Daniel da Volterra, those of Louis XIV. in the Place Vendome, by Girardon, at Dijon by Le Hongre, at Rennes by Coysevox, of Louis XV. at Paris by Bouchardon, of the same king at Bourdeaux, by Le Moyne, of the Connétable Anne de Montmorency at Chantilly, the two in the entrance of the Thuilleries by Coysevox, called Mercury and Renown.

The best equestrian statues in England are those of Charles I. by Le Sueur at

Charing Cross, of George III. in Berkeley Square by Wilton, of the same king at Liverpool by Westmacott, of General Abercrombie in St. Paul's by the same artist, of Charles II. at Windsor, of William III. in St. James's Square, London, and of the same king on College Green, Dublin, and a few others of less merit.

Of other modern equestrian statues, the very fine one of Peter the Great, on the summit of an immense rock of granite at St. Petersburgh, by Falconet, is the best. There are also equestrian statues of some merit erected to the memory of the Archduke Charles of Austria at Ratisbon, and of Frederic the Great of Prussia at Berlin. See SCULPTURE.

EQUILIBRIUM. [Lat.] *In painting and sculpture.* Equality of weight so distributed that a figure appears to stand balanced in a natural manner.

ERECT. [*erectus*, Lat.] *In architecture.* To raise an edifice, to build, to place perpendicular to the horizon.

ERECTHEUM. [Lat. Ἐρεχθεῖον, Gr.] *In architecture.* A celebrated temple of the Ionic order, erected in honour of Erectheus, on the Acropolis of Athens. From the earliest period of Athenian history there appears to have been a temple of Erecthus upon the Athenian Acropolis. This building, according to Herodotus, was burnt, and was again destroyed when Xerxes gained possession of the citadel. It at present forms a portion of the triune temple of Erectheus, Minerva, and Pandrosus. The public may expect a full treatise and delineation of this most exquisite relic of Grecian art from the pen and pencil of Mr. WILLIAM HENRY INWOOD, architect of the new church of St. Pancras, in a short time. See also WILKINS's *Atheniensia*, Col. LEAKE's *Topography of Athens*, STUART's *Antiquities of Athens*, &c.

ESCURIAL. *In the history of architecture.* The name of a village in Spain, about seven leagues from Madrid, and celebrated for the magnificent palace of the Escurial, or St. Lorenzo, which has been deemed by the Spaniards the eighth wonder of the world. This splendid structure was begun in 1557 by Philip II. in commemoration of the battle of St. Quintin, which he gained on the day of the Spanish saint St. Lorenzo, from which it received its name. The first architect was John Battiste Manegro of Toledo, and upon his death, in 1567, the work was continued by Bustamanti, one of his pupils, who died in 1597.

The building, which consists of gray stone from the neighbouring quarries, is arranged in the form of a gridiron, in allusion to the martyrdom of St. Lorenzo. The dome of the church is surrounded with eight symmetrical towers, which give a fine effect to the whole edifice.

The Escurial is a long parallelogram with four fronts. The principal or north front is six hundred and thirty-seven feet broad, and fifty-one high up to the cornice. It is flanked at each angle with a tower one hundred and eighty feet high. It has three entrances, and two hundred windows. The lower part of the central gate is adorned with eight Doric columns, and the upper part with four Ionic columns. The front on the opposite side towards the east is of equal extent, and is approached by a large square, raised on arches like a terrace, and surrounded with a lofty balustrade. The west and south fronts are of the same dimensions; the latter having five rows of windows, and the former almost none.

This vast building affords accommodation to a community of monks as well as to the sovereigns of Spain.

The apartments occupied by the monks contain various objects deserving of notice. The chapter room and the prior's apartment contain many admirable pictures. The old church is one hundred and twenty-nine feet long, and thirty-three feet broad. The refectory is one hundred and three feet long, and thirty-three broad. Among other paintings is a Lord's Supper by Titian, which is generally admired. The ground cloister is a square formed by a double row of piazzas one above the other, ninety-three feet long on each of the four sides, and seventeen feet broad. The walls of the lower cloisters are covered with paintings by the first artists. The staircase from the lower to the upper cloister is adorned with fine fresco paintings, one of which represents the foundation of the monastery and the battle of St. Quintin. The upper cloister itself is ornamented with the finest pictures.

The double cloister, which is built of granite, is fifty-two feet high, and has four grand fronts, one at each side, opening on a spacious court of eighty-eight arches, eleven in each row, supported by ninety-six columns, with a Doric below and Ionic above. The area of the cloister is divided into several compartments. A small octagonal temple, about fifty-two feet high and twenty-six in diameter, and terminating in a dome, occupies the centre. Without it is built of granite, and within of fine jasper marble; and its eight sides are alternately adorned with projecting columns, or with statues as large as

life; all the ornamental sculptures being wrought in Genoa marble.

The libraries are peculiarly valuable and interesting. In one of them is a fine collection of books in Latin, Hebrew, and Arabic characters, with an assemblage of four thousand three hundred MSS. of which five hundred and sixty-seven are Greek, sixty-seven Hebrew, one thousand eight hundred and five Arabic, and one thousand eight hundred and twenty in Latin, Castilian, and other languages. In this number are included several Bibles, particularly the Greek Bible of the Emperor Cantacuzene. There is also in this library, which is deposited in a private cabinet, many choice designs and ancient MSS. Among these is a copy of the four Evangelists, seven hundred years old, embellished with miniatures, and also Greek Liturgy, supposed to have been written by St. Basil. The apartment in which these are contained is adorned with fluted Doric columns, and the roof and frieze are covered with allegorical paintings. On a table in the centre is a small octagonal temple which represents Charlemagne in the midst of his princes and palatines. The temple is of silver, and is embellished with twenty pounds of lapis lazuli, forty-eight ounces of gold, and one thousand four hundred and forty-eight ounces of silver, besides agates, diamonds, and other precious stones. The monks are extremely attentive in showing all these curiosities to strangers.

The royal apartments are adorned with the finest paintings, which are displayed in two adjacent galleries. One of these is called the Gallery of the Infanta, and the other, which is the principal one, is seventy feet long, on the walls of which are traced many of the military achievements of the Spaniards, from which it has received the name of the Battle Hall.

The Campana communicates with the main building by a double gallery, one above the other, eighty-six feet long, and adorned with Ionic columns. The church is ascended by a fine staircase, one hundred and thirty-six feet broad, and thirty-four long, which leads to a piazza, forming the foreground of the church. This piazza opens to five arcades resting on pilasters, which support Doric semicolumns. Above these is raised a second body, adorned with six statues of the Kings of Israel, eighteen feet in length, and formed of white marble inlaid with black. This front is flanked by two towers, which are used as belfries. The inside of the church, which is Doric, is in the form of a Greek cross, with a lofty dome in the centre. It is three hundred and thirteen feet long, and one hundred and ninety-four broad, and contains forty-eight altars, enriched by fine paintings. A fine marble statue of St. Lorenzo is placed over the holy water pot, and is supposed to have been an antique discovered at Rome. The interior of the choir is exquisitely finished, and the fine paintings of Cambiaso cover the walls and cielings. The pulpit of cedar and ebony, resting on four columns of bronze, is finely ornamented; and there are two rows of stalls, including two hundred and twenty-eight seats. The chancel, which is raised by twelve steps, is adorned with bronzes, and has fresco paintings on its roof. It contains two mausoleums, one representing the statues of Charles V, his Empress Elizabeth, his daughter the Empress Mary, and his sister the Queen of France and Hungary. The other exhibits the statues of Philip II. and of his three queens, Anne, Mary, and Elizabeth, all of gilt bronze. Three doors, adorned with crystal and bronze, lead under an arch into the chancel, and conduct to three compartments, where the royal family assist at divine service. The principal altar consists of four bodies of architecture. In the first are six Doric columns, in the second six fluted Ionic columns, in the third four fluted Corinthian columns, and in the fourth two Composite ones. Fifteen statues and several paintings are attached to these, several of which are very beautiful. The ornaments of these columns and pilasters are of gilt bronze. In the centre of the altar stands a Corinthian circular table, fourteen feet seven inches high, and six feet seven inches in diameter. It is adorned with the statues of the twelve Apostles in gilt bronze, and with eight columns of red jasper marble, which can scarcely be distinguished from agates. This beautiful structure terminates in a cupola of jasper marble, which contains a statue of Christ, and is adorned with a topaz as large as the hand, and encased in a rose of gold. Within this tabernacle is enclosed another more gorgeous and magnificent; it is of a square form, nineteen inches high. It is decorated on each side with four columns and four pilasters, having their bases and capitals of gold enamel, and the cornice of silver. It is crowned with small pyramids or spires placed on pedestals of vermilion stone, embossed with gold. Two doors of rock crystal, studded with gold, appear as the two sides, and the whole, like the large tabernacle, terminates in a

cupola, on the top of which is an emerald attached to a rose of gold, and on the inside a beautiful topaz enclosed in gold enamel.

The sacristy is included in one beautiful nave, ninety-three feet long and eighty feet broad, and is enriched with relics, shrines, chalices, crosses, chandeliers, and paintings of inestimable value. On the altar called Santa Forma, adorned with the finest marble and bronzes, is preserved a splendid tabernacle, presented by the Emperor Leopold.

The treasury of this church contains many articles of great value; among these are a statue of St. Lorenzo, which weighs nine hundred marks of silver and thirty-six marks of gold; an allegorical statue of the city of Messina, which bears in its hand an ostensoire of gold, weighing fifty marks; a small temple of gilt bronze more than one hundred feet high, adorned with eight Doric columns, and surmounted with a dome; a crucifix of silver attached to a cross of gilt silver, having a topaz on the head, a large ruby in each hand, and a brilliant stone, an inch in diameter, at the feet, which was long considered as a diamond.

The place of interment for the royal family of Spain is called the Pantheon. It is below the church, and is perhaps the most splendid part of the Escurial. The descent is by fifty-nine steps, which form the first staircase. Its walls and arches are encrusted with the finest marble, and it leads to a landing place of a round form, decorated in a similar manner. After continuing to descend some stairs, we discover a beautiful front, formed by ten marble Doric columns, the ornaments of which are all of gilt bronze. On each side are placed two allegorical statues of bronze, one representing Human Nature, and the other Hope. After descending thirty-four steps, we advance to the apartment where the remains of forty-three infantas and infantos are interred. In another apartment, underneath the chancel, and still more magnificent, are interred the remains of the kings and queens. It has the form of an octagon, and is thirty-one feet in diameter, and thirty-three feet high, is incrusted with beautiful marbles of various colours, and is decorated with gilt bronze. The door is in one of the angles, and immediately opposite to it is the altar; the other six angles are separated by sixteen double Corinthian pilasters. In the intervals are arranged twenty-four urns or tombs, four being in each angle. There are other two beyond the entrance, resting on the claws of a bronze lion, and both of marble. Sovereigns, principally of the Asturian dynasty, occupy fourteen of these tombs, each sepulchre having an appropriate inscription. Only two of the princes of the French line are interred here. A large bronze lamp, surrounded with twenty-four chandeliers, hangs from the centre.

On the east and south of the palace are a series of gardens supported with walls, and laid out in terraces, which give them the appearance of hanging gardens. The ground is very unequal, and the greater part of them are disposed in the form of an amphitheatre. Ingeniously constructed stairs form the communication between the gardens.

A beautiful road, about a quarter of a league in length, and planted on both sides with lofty elms and linden trees, leads to the village of the Escurial. A subterraneous corridor, arched with freestone, and called the Mina, leads also to the village. Another road leads to Fresneria, a country house situated a quarter of a league to the east of the palace, and in the centre of it is a piazza, supported by Doric columns. The road to Madrid is excellent, but is through a naked country, without field or pastures. In going from Madrid it first winds along the Manzanarez, and leaving the Casa del Campo, it passes Pardo, and then three houses in succession, where relays of horses are provided. It then conducts to Valde Morillo, from whence the Escurial is first seen.

The beautiful gardens of the Escurial are intersected by woods and meadows, containing numerous streams and fountains and small lakes abounding with fish. In the middle of one of these lakes is a covered pavilion, adorned with eight columns, and encircled with a little garden bordered by a balustrade.

The lofty mountains which separate the province of Old and New Castile surround the Escurial. They are dreary, bare, and uncultivated. Spacious reservoirs have been constructed in these mountains for collecting the water, which is conveyed by an aqueduct to supply ninety-two fountains. The royal family, before the Spanish revolution, inhabited the Escurial from September to December, a season almost wholly employed in devotion. Since the invasion of Spain by the French the internal decorations of the Escurial have been greatly injured, and the finest paintings have been carried to the Louvre. The position of the Escurial, according to trigonometrical observations, is West longitude 4° 7′ 50″, and North latitude 40°

35′ 50″. See Townshend's *Travels in Spain*, vol. ii.; Laborde's *View of Spain*, vol. v. p. 143—155; Link's *Journey through Portugal*, p. 302; and Francisco de los Padros *Description breve del Monasterio de St. Lorenzo el real del Escorial.*

ETCH or ETCHING. [*etizen*, German.] *In engraving.* A mode of engraving on copper and other metals or substances by drawing with a needle inserted in a handle, called an etching needle, on and through a thin ground, which being corroded or bitten by aquafortis, forms the lines upon the plate.

The tools and substances employed in this free and artistlike way of engraving are varnishes or grounds of various sorts, both hard and soft, which can be purchased at the colour shops; etching needles of various sizes, etching boards, rules, &c. The design is transferred to the ground in the same way as directed for engraving, and then the lines and figures are traced, drawn, or etched through the ground with the needles. See ENGRAVING.

The most eminent artists of different nations who, after Albert Durer, have distinguished themselves by their abilities in etching, and whose works are the fittest examples for the student, in Germany are Jean Guillaume Bauer, born at Strasburg in 1600, and died at Vienna in 1640; he engraved many battle pieces, capriccios, and historical pieces with great ability; Mathieu Merian, 1661, who excelled in natural history, entomology, &c.; Wenceslas Hollar, 1676, of whom G. Vertue published in London, in 1752 and 1759, a description of his works in one volume 4to.; Jonas Umbach, a painter and etcher born at Augsburg in 1624, and died there about 1690, engraved many excellent plates from scripture history; Jean Henri Roos, born at Ottendorf in the Palatinate, in 1631, died at Frankfort in 1680; he excelled chiefly in animals; J. J. de Sandrart, 1698, who engraved after Raffaelle, &c.; Franç. Ettinger, 1702; Phil. Roos, 1705; Fel. Meyer, 1713; Jean Christophe Dietsch, also a landscape painter, born at Nuremburg in 1710, and died in 1769; Pierre Von Bemmel, born at Nuremburg in 1689, and died in the same city in 1723, landscape; Franç de Paule Ferg, born at Vienna in 1689, died in London 1740; G. Phil. Rugendas, born at Augsburgh 1666, died 1742; J. F. Beich, born at Munich 1665, died there in 1748; J. Frey, born at Lucerne 1689, died at Rome in 1760; Thiele, 1752; Wolfgang Kilian, 1759; Phil. Jérôme Brinkmann, born at Spire 1709, died at Manheim in 1761; J. E. Reidinger, born at Ulm in 1698, died at Augsburgh in 1767, celebrated for his animals and hunting pieces; Francois Edmond Weirotter, born at Inspruck in 1730, died at Vienna in 1773; Chret. Guill. Ernest Dietrich, also a painter, born at Weimar in 1712, died at Dresden in 1774; his works are both numerous and excellent; a catalogue of them is printed in "*Les Melanges Artistiques de* M. MEUSEL; Georges Fred. Schmidt, born at Berlin in 1712, died in the same city in 1775; a catalogue raisonné of whose works, in two parts, was published at Leipsic in 1789; Christ. Louis de Hagedorn, 1780; Jos. Wagner, born at Thalendorf in 1706, died at Venice in 1780; Salomon Gessner, born at Zurich, 1734, died there in 1788; Daniel Chodoweichi, born at Dantzic in 1726; his works have been described by M. Meusel; Balthasar Antoine Dunker, born at Saal near Stralsend in 1746; M. A. Geyser; H. and C. Guttemberg; Jacques Philippe Hackert, also a landscape painter, born at Prenzlau, in Brandenburgh, in 1737; John Hackert, born at Amsterdam in 1634; George Hackert; Maria Angelica Kaufman, born at Coire in the Grisons in 1747, died at Rome in 1807, also an eminent painter. Her etchings are various and beautiful. Ferdinand Kobell, also a landscape painter, born in 1740; Philip James De Loutherbourg, born at Strasburg in 1740, died at Hammersmith, near London, in 1812, many excellent etchings after his own designs; Jean Meill, born at Antwerp 1599, died at Turin in 1664; Oeser, Rode, Schellenberg, Tischbien, Weisbrodt, Wille, Zingg, &c. &c.

Among the artists of the Netherlands who have rendered themselves celebrated by their etchings are Lucas Sim. Frisius, 1640; Pierre Soutman, 1640; many pieces after Vandyck, Rubens, &c.; Corn. Schut, also a painter, born at Antwerp in 1590, died there in 1660; Jonas Suyderhœf, born at Leyden 1600; J. G. Van Vliet, born in Holland 1608; many spirited etchings after Rembrandt; Ant. Van Dyck, born at Antwerp in 1559, died in London 1641; Jean Fyt, born at Antwerp in 1625, died in 1644; Jean Both, the celebrated painter, born at Utrecht in 1609, died at Venice in 1650, many very spirited and artistlike etchings, of which there were some fine specimens in the cabinet of M. Paignon Dijonval; P. Potter, born at Enkhuysen in 1625, died in 1654; Pierre Van Sompelen, Jérôme Wittoweck, Jacques Neefs, Franç. Sneyders, the celebrated painter of animals, born at Antwerp in

1579, died in 1657; Antoine Waterloo, landscape painter, born at Utrecht in 1618, died there in 1662; Lucas Van Uden, born at Antwerp in 1596, died there in 1662; Corn. Bega, born at Haarlem in 1620, died there in 1664; his etchings are both numerous and excellent; Theodore Van Thulden, 1662; Jean Vischer, born at Amsterdam in 1636, and Corneille Vischer, born at Haarlem in 1610, died in 1673, of whose works a catalogue has been published by Ger Hecquet in 1754; Adrian Van der Velde, born at Amsterdam in 1639, died there in 1672, animals and landscape; Pierre Van Laar, born at Laaren, in Holland, in 1613, died at Haarlem in 1674; Paul Rembrand van Ryn, born near Leyden in 1606, died in 1674; of the numerous etchings of this great artist several catalogues have been published, one in 1751 by Gersaint, another by Helle and Glomy in 1756, to which P. Yver added a supplement; in 1759 Ant. de Burgy published another, but they have been all superseded by the excellent catalogue raisonné of Adam Bartsch, published at Vienna in 1797; Albert Van Everdingen, also a landscape painter, born at Alkmaer in 1621, died there in 1675; Du Jardin Morghen; Jacques Jordaens, the celebrated painter, born at Antwerp in 1594, died there in 1678; R. Stoope, born in Holland 1612, died in England 1686; he engraved a set of seven pieces relating to the marriage of Charles II. and Catherine of Portugal; Jean Van der Velde, born at Leyden about 1598, died 1679; Reinier Nooms, called Zeeman, born at Amsterdam in 1612, and died in 1680; he etched many excellent sea pieces; Melch. Kussel, born at Augsburg in 1621, died in 1683; Nic. Berghem, the celebrated painter, born at Haarlem in 1624, died in 1683, of whose works a descriptive catalogue was published by Winter in 1767; Adrian Van Ostade, born at Lubeck in 1610, died at Amsterdam in 1685; Abr. Genoels, born at Antwerp in 1638, died in 1685; Herman Saftleven, born at Rotterdam in 1609, died at Utrecht in 1685; Roland Rogmann, born at Amsterdam in 1607, died in 1686; Jean Bischop, known by the name of Episcopius, born at the Hague in 1646, died at Amsterdam 1686; Thomas Wyck, born at Haarlem in 1618, died there in 1686; Jacques Ruysdaal, the landscape painter, born at Haarlem in 1635, died at Amsterdam 1681; David Teniers, born at Antwerp in 1611, died in 1690; Herman Van Swaneveldt, born at Voerden, in Holland, in 1620, died at Rome in 1690; Adrian Van der Cabel, born at Rhyswick in 1631, died in 1695; Ant. Franc. Boudewyns, known by the name of Boudouin, 1700; Corneille du Sart, a painter, engraver in aquafortis and mezzotinto, born at Haarlem, in 1665, died there in 1704; Romyn de Hooghe, born at the Hague in 1638, died in 1718; Gerard Lairesse, born at Liege in 1640, died at Amsterdam in 1711; Jean Luycken, born at Amsterdam in 1649, died there in 1712; Jean Gottlieb Glauber, 1726; Jean Van Hughtenburg, painter and etcher of battles, and engraver in mezzotinto, born at Haarlem in 1664, died at Amsterdam in 1733; Jean Punt, also a painter, born at Amsterdam in 1711, died in 1770; Cornelius Ploos Van Amstel, who is also celebrated for his engravings in imitation of drawings, born at Amsterdam about 1730.

The French artists have excelled in the art of etching, which they have brought to great perfection, particularly in finished works upon a small scale. The principal who have succeeded in this spirited and artistlike department of art are Et. Du Perac, born at Paris about 1550, died in 1601; Jacques Callott, born at Nancy in 1593, died there in 1635; his works in sacred and mythological subjects, history, portraits, titles, frontispieces, grotesques, landscapes, &c. are very numerous and much admired; Jean Morin, born about 1612, died in 1665; François Perrier, born at Mâcon in 1590, died at Rome in 1650; Laurent De La Hire, born at Paris in 1606, died there in 1656; Jean Boulanger, born at Troyes in 1613, died in Paris in 1660; Michael Dorigny, who engraved much after Vouet, 1665; Et. Bourdon, Et. Bandet, 1671; Franç. Chauveau, born at Paris in 1620, died there in 1676; Abr. Bosse, born at Tours in 1610, died at Paris in 1678: Gabr. Perelle, born at Paris 1622, died 1680; Franç. Tortebat, born at Paris 1626, died 1690; Israel Silvestre, born at Nancy in 1621, died at Paris in 1691; Claudia Bousonet Stella, 1697; Jean Baptiste Monnoyer, who painted the flowers at the British Museum, born at Lisle in 1635, died at London in 1699; Elisabeth Sophie Cheron, born at Paris in 1648, died there in 1711; Sebastian Le Clerc, born at Metz in 1637, died at Paris in 1714; a catalogue of this artist's works was published by Jombert in 1774; Antoine Watteau, born at Valenciennes in 1684, died at Paris in 1721; Ant. Coypel, born at Paris in 1661; died there in 1728; Bernard Picart, whose numerous and excellent works have procured him a deservedly great name, was born at Paris in 1673, and died at Amsterdam in 1733; Ch.

Nic. Cochin, born at Troyes in 1619, died at Paris in 1686; J. B. Oudry, born at Paris in 1686, died in 1755; Jacques Phil. le Bas, born at Paris in 1708, died in 1782; Pierre Quentin Chedell, born at Châlons, in Champagne, in 1705, died about the year 1762; Jean Moyreau, 1762; A. C. Ph. Comte de Caylus, born at Paris in 1687, died in 1765, known by the number and excellence of his works and his writings on antiquities; Nic. Ch. Silvestre, 1767; Ch. Hutin, born at Paris in 1715, died at Dresden in 1776; J. B. Le Prince, born at Paris in 1733, died in 1781; Ch. Nic. Cochin the younger, born at Paris in 1715, died there in 1788; a catalogue of the works of this able artist is published by Jombert, Paris, 8vo. 1770; Laurent J. Cars, born at Lyons in 1702, died at Paris in 1771; Choffart, Flippart, S. Aubin, Demateau, J. de Longueuil, Marcenay de Ghuy, De S. Non, Denon, Tardieu, De Sève, Pillement, Hibon, Willemin, &c.

Among the Italian artists who have excelled in etching are Agostino Veneziano, who etched many of the designs of Michel Angiolo, Raffaelle, &c. and died in 1514; Franc. Mazzuoli, commonly called Parmegiano, born at Parma in 1504, died at Casal Maggiore in 1540; his etchings, after his own pictures, are numerous and excellent; Marco da Ravenna, died in 1540; Giacomo Robusti, surnamed Tintoret, born at Venice in 1512, died in 1594; Agostino Caracci, born at Bologna in 1558, died in 1602; Annibale Caracci, brother of the last, born at Bologna in 1560, died at Rome in 1609; F. Baroccio, born at Urbino in 1528, died at Rome in 1612: B. Schidone, born at Modena in 1560, died at Parma in 1616; C. Procaccini, born at Bologna in 1546, died at Milan in 1626; F. Villamena, born at Assisi in 1566, died at Rome in 1626; Giacomo Palma, born at Venice in 1544, died in 1628; Raffaelle Sciaminose, born in 1570, died in 1615; Guido Reni, born at Calvenzano, near Bologna, in 1575, died in 1642; Lanfranco, born at Parma in 1581, died at Rome in 1647; Pietro Testa, born at Lucca in 1611, died at Rome in 1648; Guiseppe Ribera, called Il Spagnuoletto, born at Gallipoli in 1593, died in 1656; Giov. Franc. Barbieri, called Guercino, born at Cento in 1590, died at Bologna in 1660; Pietro Santi Bartoli, 1670; Giov. Benedetto Castiglione, born at Genoa in 1616, died at Mantua in 1670; Salv. Rosa, born at Naples in 1615, died at Rome in 1673; Gasp. Dughet, called Le Poussin, born at Rome in 1613, died in 1675; Lucas Giordano, 1705; Carlo Maratti, born at Camerino in 1625; died at Rome in 1713; Pietr. Aquila, 1720; Marco Ricci, born at Belluno in 1689, died at Venice in 1730; J. B. Tiepolo, born at Venice in 1697, died at Madrid in 1770; André Scacciati, 1771; Franc. Bartolozzi, Bern. Bellotto, called Canaletti, Fr. Cunego, Piranesi, Volpato, &c. &c.

Among our English artists who have distinguished themselves by the use of the etching needle are Franc. Barlow, who died in 1702; Dan. Marot, 1712; Jon. Richardson, born at London in 1665, died there in 1745; Arthur Pond, born in 1700, died in 1758; William Hogarth, born at London in 1698, died in 1764; of whose numerous and admirable works an account may be found in the *Biographical Anecdotes of Will. Hogarth*, London, 1766; Rich. Earlom; William Woollet, born at Maidstone in 1735, died at London in 1785; Robert Walker, born in Somersetshire in 1572; James Gammon, born about 1630; Thomas Worlidge, in the style of Rembrandt, born at Peterborough in 1700, died at Hammersmith in 1766; J. B. Chatelain, born in England about 1710; Captain William Bailly, born about 1726; Thomas Gainsborough, born at Sudbury in 1727, died in 1788; Peter Tillemans, James Barry, Paul Sandby, Robert Pollard, James Gilray, the inimitable caricaturist, Robert Dodd, Thomas Vivares, and most of our eminent engravers.

The best works for reference concerning the subject of etching, and of the artists who have practised it, are, among others, mentioned under engraving. *Le Catalogue du Cabinet de M. de Marolles; le Cabinet des Singularités d'Architecture, de Peinture, Sculpture, et Gravure*, par FLORENT LE COMTE; *Description du Cabinet de M. Lorangére*, par M. GERSARIT; *Le Catalogue du Chevalier de la Roque*, by the same author; *Le Catalogue raisonné du Cabinet de M. De Fonspertuis*, by the same; that of the *Cabinet de M. Mariette*, par FRANC. BASAN; *Le Catalogue raisonné des Estampes de M. Julienne*, par P. REMY; *Les Notices générales des Gravures divisés par Nations, suivies d'un Catalogue raisonné d'une Collection choisée d'Estampes*, par M. HUBER; *Le Catalogue du Cabinet du Comte de Praun*, par CHRISTOPHE DE MURR, 8vo. 1797; *Le Catalogue raisonné des principaux Graveurs et de leurs Ouvrages*, par FUESSLIN; *Le Manuel des curieux et des Amateurs des Arts*, by the same; *Le Dictionnaire des Artistes dont nous avons des Estampes*, par le Baron de HEINECKEN; *Cabinet de M. Paignon Dijonval*, various periodical works, such as *Le Mercure de France, la Bibliothèque et la Nouvelle Bibliothèque des Belles Lettres et*

des Beaux Arts, en Allemand, les Journaux artistiques publiés, par M. de Murr et M. Meusel. See Engraving.

Etruscan. [from Etruria, ἑτερυρία, Gr.] *In the history of the arts.* A country in Italy, now called Tuscany, lying on the Tyrrhene sea, reaching from the banks of the Tiber to the river Macra, and now forming the territory of the Dukedom of Florence. The Etruscans, a colony from Greece, were antecedent to all the rest of the Italian peninsula in cultivating the arts, which they practised even before the reputed time of Cadmus. All their arts were derived from the Greeks by the migration of the Pelasgi; and their style of art should be considered as a school and as a system, rather than as the works of native Etruscan artists. The people of Etruria carried the cultivation of the fine arts to a considerable degree of perfection, and gave their name to an order of architecture after the Roman system. In the earliest period of their history, when the first inhabitants of Etruria, having lost their liberty, the Pelasgi established themselves near to their territory, drove the Umbri from the places they occupied, about 1643 before Christ. About 992 years before the vulgar era, 239 years before the foundation of Rome, the Etruscans were a powerful state, possessed of a regular form of government and territory reaching from the upper to the lower sea, with twelve principal cities. The Umbri were their principal rivals, and were for a long time at war. About this period of their history the arts and sciences began to be cultivated by the Etruscans. Nola and Capua were founded about 801 years before the vulgar era, and Rome was founded 752 years before the same epoch. Its new inhabitants adopted the Pelagic characters in their writings, modified by the Etruscans, and adopted many of their customs, sciences, and arts. If as it is related that an ancient statue of Romulus without a tunic was really sculptured in his own time; if those of Numa, of Tarquinius Priscus, of Servius Tullius, and of Actius Navius the soothsayer, were works cotemporary with the personages they represented, it is clear they must have been the performance of Etruscan artists, and that sculpture had arrived to great perfection among them. Pliny speaks of a statue of Hercules anterior to Evander, of a quadriga that Romulus had made of silver taken from the inhabitants of Camerinus, which he consecrated to Vulcan; and of a statue of Janus that the same king erected when he concluded peace with the Sabines. Under Tarquinius Priscus the Etruscans practised the art of modelling or plastic. They formed a statue of Jupiter of terra cotta, which was painted red, and another of Hercules of the same material. This mode of sculpture is alluded to by Propertius, lib. iv. 1, in the following verses,

"Fictilibus crevere Diis hæc aurea templa;
Inque Jovis dextra fictile fulmen erat."

The Etruscan style of art is that which prevailed in that school from its foundation down to a certain epoch, which the Latins distinguished by the word Tuscanicus. This style, according to Strabo, resembled the Egyptian, or rather the early Greek style. Quintilian calls it *dry*, and Cicero *hard*.

The best authors to consult on the Etruscan style of art are Winckelmann in his *Histoire de l'Art;* Guarnacci in his *Origine Italiche;* Tiraboschi in his *Storia della Literatura;* Lanzi in his *Saggio sulla lingua Etruria;* Heyne in his *Mém. de l'Acad. de Gœttingiæ* for the year 1774; and the various works of Passeri, Gori, and Buonarotti upon Etruscan monuments of art.

Euripus. [Lat. Εὔριπος, Gr.] *In ancient architecture.* The canal or trench that separated the arena from the seats in the circus. See Circus.

Eurythmy. [*eurythmia*, Lat. Εὐρυθμία, Gr.] *In all the arts.* Regular and symmetrical measure, harmony of proportion. It is used by John Evelyn, Sir Henry Wotton, and some of our early writers on architecture to designate the just proportions of architecture. The latter writer defines eurythmy in architecture to be "that agreeable harmony between the breadth, length, and height of all the rooms of the fabric, which suddenly, where it is, taketh every beholder, by the secret power of proportion." Eurythmy is in Vitruvius (lib. i. c. 2) one of the six essentials or considerations which accomplish the whole art, namely, *ordinatio, dispositio, eurythmia, symmetria, decor, distributio.*

Eustyle. [*eustylos*, Lat. Εὔστυλος, Gr. from Εὖ beautiful, happy; and στῦλος a column.] *In architecture.* The fifth mode, according to Vitruvius, of distributing the intercolumniations of a building. The eustyle method has two diameters and a quarter between the columns. It is one of the most beautiful arrangements that can be given to a row of columns. See Architecture, Column, Order, Intercolumniation.

Evangelists. [*Evangelistæ*, Lat. Εὐαγγελιστής, Gr.] *In painting and sculpture.* Figures representing the four evangelists or

writers of the history of Jesus Christ, called the Gospel. The evangelists, Matthew, Mark, Luke, and John, whether represented singly as on the acroteriæ of St. Paul's cathedral, or in a composition like Leonardo da Vinci's Last Supper are known by costume and character generally received among artists and critics, as well as by certain symbols and attributes.

Upon an antique glass, an engraving of which is published by Buonarotti, representing the miracle of the loaves and fishes, are four rolls or ancient volumes of writing, to represent the four gospels of the four evangelists; and upon another published in the same work St. Peter and St. Paul are represented with one such volume between them to indicate, as he says, that they preached but one gospel, one to the Jews, and the other to the Pagans. Besides distinguishing the four evangelists from the rest of the apostles by attributes of writing or as inspired penmen, they are usually represented with personal and unchangeable attributes, as St. Matthew with a book, St. Mark with a lion, St. Luke with an ox, and St. John with an eagle.

EXCAVATIONS. See ELEPHANTA, ELLORA.

EXCHANGE. *In architecture.* An edifice where merchants, bankers, brokers, &c. meet to negotiate their affairs. Among the Romans the basilica answered for the purpose of the modern exchange. The Royal Exchange of London, by Sir Christopher Wren, and the Exchanges of Liverpool and Amsterdam are among the finest buildings of this description in Europe.

EXECUTION. *In all the arts.* A ready spirited mode of performing any portion of the art, showing a practised hand, and a ready mind.

EXEDRA. [Lat. Ἐξέδρα, Gr. from Ἐξ, a preposition meaning *out of* or *from*, and ἕδρα, a seat or chair.] *In ancient architecture.* A small room set apart for conversation, which were common in the gymnasiæ, baths, and other public buildings; something like the modern boudoirs or cabinet. See BOUDOIR, CABINET. Cicero well defines the *exedra* as "cella ad colloquendum."

EXERGUE. [Fr.] *In medallurgy.* The place on a medal or coin below the type, which has generally the date or other particular inscription.

EXHIBITION. [*exhibitio*, Lat.] *In all the arts.* A display or setting forth of works of art, distinguished from a gallery, which is permanent, while an exhibition is tempory and sometimes periodical. The French call such periodical displays *expositions.*

EXOMIS. [Lat. Ἐξωμις, Gr.] *In ancient costume.* A garment or tunic used by the Greeks, which hung straight upon the body and left the shoulders uncovered. Pollux in the 118th § of his fourth book says, the *exomis* was used by the actors of comedy, and was a white tunic without ornament and without any seam on the left side.

EXOSTRA. [Lat. Ἔξοστρα, Gr.] *In ancient architecture.* A machine or engine of timber, wherewith such things as are acted within or behind the stage in the ancient theatres were shown to the spectators. Also a bridge thrust out of a turret by pulleys on to the walls of a town, by which the besiegers entered. The dramatic stage of the ancients never represented the interior of a building, but always an open space; and when the action required that they should exhibit to the spectators or the actors what was passing inside of a house or palace, it was performed by the machine called *exostra* or *ekkyklema.*

EXPRESSION. [*expressio*, Lat.] *In all the arts.* A representation by the imitative arts. More particularly the character or meaning of the soul, as expressed by the countenance, by which the figures appear to live, think, and breathe; and appertains principally to painting and sculpture. In this meaning, *expression* is one of the highest qualities, if not the very highest of the art. Without expression there can be no character, and without character there can be no interest. See CHARACTER. The expression in the face of Jupiter of Phidias has been commended from authority, and Homer is full of the characteristic expressions of the countenances of his heroes. The Laocoön and the Niobe are models of expression in sculpture, and the heads of Raffaelle in his Cartoons, and of Michel Angiolo in his Prophets and Sibyls, in painting.

The heads designed by LEBRUN as descriptive of the expression of each passion of the soul may be consulted, but not depended upon, as they are exaggerated in most instances, and erroneous in many. MR. BELL's treatise upon the anatomy of expression is much better suited to the use of the student, as being founded upon true and philosophical principles. A series of heads, published in France by M. M. LENURE, after different great masters, illustrative of expression are also very useful, as well as CHAMBERLAIN's engravings of the heads of Holbein. An attentive observance of great tragedians or actors is also very useful, if compared with the feeling they mean to express.

Upon *expression* in art the student would

do well to consult portions of the *Traité de la Peinture de* LEONARDO DA VINCI; a portion of the second book of the *Trattato dell' arte della Pittura de* LOMAZZO; the third volume of the *Entretiens de* FELIBIEN, *sur les vies et les ouvrages des Peintres;* the seventh chapter of the tenth book of the *grand Livre des Peintres*, par LAIRESSE; several of the chapters in RICHARDSON'S *Treatise on Painting*; *Réflexions sur la Peinture*, par M. DE HAGEDORN; *The School of* RAFFAELLE; or, *the Student's Guide to Expression in Historical Painting*. By B. RALPH, London, folio, 1759. *Têtes d'Expression, gravées par* LEMIRE. *La Physionomie de* LAVATER, and many of the books referred to in the article PAINTING.

EXTREMITIES. [from extremity, *extremitas*, Lat.] *In painting and sculpture.* The parts most remote from the middle; that is, technically, the head, the feet, and the hands. To draw, model, or paint the extremities well are of the utmost importance to the artist, and should be studied with the greatest care. The sculptors of Greece and the old masters in painting excelled in this important branch of the arts. In the most ancient periods of the art the bodies of statues were formed of wood, while their extremities were elaborately finished of stone. Such works were called acrolithean. See ACROLITHES.

EX VOTO. [Lat. from the preposition *ex* rendered adverbially with its case and *voto*, a vow.] *In the history of ancient art.* Any thing dedicated votively; such as various parts of the human body represented in sculpture, of which there are many ancient specimens in the principal galleries of antique sculptures in England and on the continent. Examples of these votive gifts are very ancient, and antiquity affords many examples of them. They are also still presented in catholic countries, to avert danger and in return for good received. The modern *ex votos* are generally miserable daubs of pictures.

EYE. [eaȝ.] *In all the arts.* The organ of vision; the power of perception. Also in architecture a small circular window, sometimes also called a bullseye. In painting and sculpture, the eyes of a figure form a most essential part of beauty and expression. The just expression of the eyes, and delineation of the brilliant play of light that gives such effect to their expression, is one of the most difficult parts of art to be attained. In sculpture, particularly of portraits, the bright speck of light which appears on the prominent part of the cornea is generally represented by a small and effective cavity. Many antique statues had their eyes formed of gems and vitreous compositions. Busts, with cavities for the entire eye are to be found in the principal collections of sculptures in Europe. There are several of this description in the Towneley gallery of the British Museum.

F

FABLE. [Fr. *fabula*, Lat.] *In painting and sculpture.* A feigned story intended to convey some moral precept; the series or contexture of events that constitute a poem, a picture, or other composition. See MYTHOLOGY.

FABRICK. [*fabrica*, Lat.] *In architecture.* A building; an edifice. A fabrick is gerally understood to mean a building of large dimensions and extent; as a cathedral, a royal palace, a college, and such like structures.

FAÇADE. [Fr.] *In architecture.* The front view or elevation of a building, that is taken in by the eye at one view. Thus a square insulated building has properly four façades, but the word is mostly restricted to the principal front, particularly when it terminates the prospect of an avenue. Upon the distribution and disposition of the façades of buildings, good sense and utility must be first consulted; then propriety and consistency, and always character. See ARCHITECTURE, ELEVATION, DISTRIBUTION; also *Le Génie de l'Architecture*, par CAMUS DE MEZIERES; Paris, 8vo. 1780. The first volume of a work by JEAN FRANÇOIS BLONDEL, entitled *de la Distribution des Maisons de Plaisance;* particularly that portion where he expressly writes on *la Décoration des Façades.* The same author also treats upon the same subject in his excellent *Cours d'Architecture.*

FACE. [Fr. *facies*, Lat.] *In painting and sculpture.* That part of the human figure which forms the front or intellectual part of the head; the countenance or visage. *In architecture.* A plain member or band. On a proper delineation of the face depends all the intellectual expression of a figure, and the artist must study this portion of the wonderful human fabric, which Milton appropriately calls the "human face divine," with the utmost assiduity and attention. See CHARACTER, BEAUTY, EXPRESSION.

FACIA. See FASCIA.

FACIEBAT. See EPOIEI.

FACILE. [Fr. *facilis*, Lat.] *In all the arts.* Ready in performing, dexterous. An artist is said to have a facile pencil, chisel, or burin, when his knowledge and practice enables him to work with readiness and quickness.

FACILITY. [*facilitas*, Lat.] *In all the arts.* Readiness, performing with little labour. A painter born with an aptitude or genius for his art draws his outlines and distributes his colours with lightness, freedom, and dexterity, the very converse of labour and heaviness. Rubens had this quality to perfection, and it is the pinnacle of art and the perfection of study. The student however must not confound mere rapidity and a dashing sketchiness with this high quality of the practical part of the arts. An architect is said to have a facility of composition when his knowledge of his art is such that he can compose, arrange, and distribute the apartments of an edifice with readiness and skill, with judgment and propriety, according to the character and requisites of his design.

FAENZA. *In the history of the arts.* The *Faventia* of the ancients, a city of Italy, and capital of the department of the Amone, is the see of a bishop suffragan of Ravenna. Mr. Eustace, the latest author of travels in Italy, describes this ancient town as spacious and well built. Its great square has a fine range of porticos on either side, and a Corinthian church belonging to the Dominicans. The cathedral, which is Gothic, stands in the great square, and is ornamented with a handsome steeple, five stories high, with ballustrades. There is a fountain near the church, having a basin surrounded with four lions of brass, and encompassed with a wrought iron rail. Faenza was once celebrated for its pottery, to which it gave its name. (See FAÏENCE.) The pottery obtained also the name of *Majolica*, from the inventor of it. Mr. Eustace observed in the vicinity of this city a few traces of the pine groves, which appear to have formed one of its distinguishing features in ancient times. Distance from Ravenna, twenty miles south-west, north latitude, 44° 18′, east longitude, 11° 51′. See Keysler's *Travels*, vol. iii. p. 246; Eustace's *Classical Tour through Italy*, vol. i. p. 142, 143.

FAÏENCE. [Fr.] *In painting.* A sort of fine pottery or earthenware glazed with a fine varnish, and painted in various designs: named from Faence or Faventia, where the art of manufacturing was revived after having been forgotten by its original inventors the Egyptians, who made a similar kind of pottery covered with a green or blue enamel, of which many examples are to be found in cabinets of the curious.

It was for a long time believed that Raffaelle employed his great talents, at least in his youth, in painting vases, pateræ, and other pieces of *faïence* made at Urbino, his native town. This belief occasioned Malvasia to call Raffaelle *the potter of Urbino*, in his *Histoire des Peintres de Bologne.* But the incorrectness of this opinion, which probably arose from many of his designs appearing upon them, is now sufficiently known; and Malvasia himself has retracted all that he had advanced, derogatory to the prince of painters, as far as reprinting the pages which contained the passage in question, without the offensive epithet. The period of the fine porcelain called Raffaelle's ware, as containing copies of many of his works, and being in general after his manner, does not derive its date till after the death of that great painter, being from about the year 1530 to that of 1560. All the works of this kind, executed before or after those thirty years, are more or less inferior in style and execution to those made in that time. The error probably arose, and the offensive appellation obtained from the parents of the great Raffaelle having established a manufactory of the pottery of Faïence at Urbino, and that they were painted after the designs of the great master or his pupils by Raffaelle dal Colle, or dal Borgo, whose principal occupation was executing those exquisite little works that embellish this ware. See also ENAMEL.

FAIRFORD. *In the history of architecture.* A market-town in Gloucestershire, situated at the foot of the Cotswold Hills, on the banks of the river Colne, at an old ford near the confluence of that river with the Thames. The town consists of two streets, neatly and regularly built, and is principally distinguished for its fine Gothic church, and the exquisitely painted glass which it contains. The church, which is dedicated to the Virgin Mary, is a fine specimen of the Gothic, which prevailed about the end of the fifteenth century. It consists of a lofty nave, a chancel, side aisles, and a low tower rising from the centre of the edifice, which has been supposed to have been intended for the foundation of a spire. The whole of the building, which is one hundred and twenty feet long and fifty-five broad, is embattled and sustained by pinnacled buttresses, those of the tower being flattened

and gradually diminishing to the top. Statues as large as life are rudely sculptured on their bases; and round the architrave is a series of grotesque figures. The exterior is adorned with many niches, which had once contained carved statues. The architecture of the interior is remarkably fine; light fluted pillars, sustaining four arches on each side, divide the aisles from the nave. The aisles are continued parallel with the chancel, with which there is a communication by two arches of equal height. The chancel is encircled with a fine oak screen, adorned with finely carved tabernacle work, and stalls of the same work. The pavement is chequered with blue and white stones.

This magnificent edifice was founded by John Tame, an opulent merchant, who having, in 1492, taken a vessel laden with painted glass, and bound from a Flemish port to Italy, resolved to have a large building erected for its reception. Having been for some time settled at Fairford, he began the present church in 1493, and disposed of the glass in twenty-eight windows, each having four or more compartments. The principal subjects of these paintings are scriptural, some of them are the Roman emperors who opposed and who favoured the establishment of Christianity. The designs in the great west window are the Resurrection and the last Judgment, the colours of which are so brilliant, and the drapery so delicate that Mr. Dallaway regards them as a more pleasing specimen of ancient art than will often be met with in England or on the continent. Vandyck considered some of the figures as so well done that they could not be surpassed by the best pencil.

The church contains a variety of monuments and sepulchral inscriptions. A tomb of Italian marble is erected in the north aisle to the memory of Sir Edmund Tame, son of the founder of the church.

Fane. [Fr. *fanum*, Lat.] *In architecture.* A temple or spot of ground consecrated to religion. *Fane* rather means the whole site occupied in sacred office, and *temple* the building itself.

Fano. *In the history of art.* The ancient *Fanum* or Fortunæ in Umbriæ, between Pisaurum now Pesaro and Senegallia the present Siena. A seaport town of Italy, in the duchy of Urbino; it is a well built and very handsome town, surrounded with a lofty wall of brick, having towers at a small distance, and bastions towards the sea. The churches are remarkable both for their architecture and for the paintings which they contain. The triumphal arch erected in honour of Augustus, who sent thither a colony called Julia Fanestris, is now one of the gates of the town. It is of the Corinthian order; and in the time of Constantine a gallery or portico of five arcades was built over it. It was greatly injured by the artillery in a contest between this town and Julius II. Several pillars were still lying (when Mr. Eustace visited the town) as they seem to have fallen on the platform above the arch. There are three different inscriptions on the three cornices. The theatre was formerly a magnificent and commodious building, but it is now in ruins. The Via Flaminia have turns from the sea towards the Apennines. See Eustace's *Classical Tour in Italy*, vol. i. p. 153.

Fasces. [Lat.] *In ancient costume.* Bundles of rods carried before the magistrates of Rome by the lictors, with an axe bound up in the middle of them. The rods and axe were to intimate that some offenders for lesser crimes were to be chastised with rods, and others, when there was no other remedy, were to be cut off from the people by the axe. The dignity of the magistrate was expressed by the number of lictors bearing fasces before him. A dictator had twenty four, a consul twelve, and a prætor urbanus or mayor of a city two. The word is also applied to the office or dignity itself; as *sumere faces* meant to assume the office, *fasces deponere* to lay down his command, and *fascibus abrogatis*, his authority being taken away. According to most of the Roman historians, Tarquinius Priscus brought the custom of bearing the fasces as an ensign of office, with those of wearing rings, the curule chairs of ivory, purple habits and other regal symbols from the Etruscans. Upon the arch of Titus and other monuments of Roman art, the fasces are represented as decorated with a crown of laurel.

They are also used by modern artists as emblematical of Roman history, and also to entrances of royal palaces, municipal edifices, courts of justice, &c. as emblems of magistracy.

Fascia. [Lat. Φασκία, Gr.] *In architecture.* A fillet or flat member; particularly applied to the band or broad fillet in an architrave; which, when subdivided as in the Ionic and Corinthian orders are called the first, and second, or third fascia.

Fastigium. [Lat. from *fastu*, lofty, high, proud, as *litigium* from *lite*, &c.] *In architecture.* The summit, apex, or ridge of a house or pediment; used by Vitruvius for the pediment or the Greek ἀετὸς. See Aetos.

FECIT. [Lat.] *In all the arts.* A word used by artists to inscribe their works, to indicate the designer; as Michel Angiolo, fecit.

FEEBLE. [*foible*, Fr.] *In all the arts.* Weak, imbecile. A picture may be feeble in colour, drawing, character, or expression, and a statue in all but colouring, when timidity or want of knowledge guides the hand rather than that boldness, which is the result of experience, knowledge, and practice; it is the debility of caution, the opposite of boldness; and the antipodes of bravura. Feebleness of execution, if the artist be young, may be conquered, feebleness of conception never.

FELICITY. [*felicitas*, Lat.] *In the mythology of the arts.* A symbolical moral deity of the ancients, called Felicitas by the Romans and Εὐδαιμονία by the Greeks. She was the goddess of happiness, prosperity, or blissfulness, and a personification of one of those moral beings by whose aid the ancients supposed mortals obtained a place in the heavens, and to whose honour the Romans were enjoined in the laws of* the twelve tables to erect altars. There is scarcely a virtue or a blessing of life but what is represented on the medals of the emperors. These figures were put on the reverses out of flattery, and often on those of a Domitian or a Nero, with the distinguishing abbreviation S. C. senatus consultum, to indicate that it was a piece of national flattery. This minor divinity is represented by ancient poets and artists with the caduceus of Mercury in one hand, and the cornucopia in the other, as emblems of peace and plenty, the two chief ingredients of happiness. In the hymn to Mercury, attributed to Homer, Apollo designates the caduceus as the sceptre of felicity and of riches. Horace speaks of her under the name of Faustitas (εὐτυχια), and hints that she prefers dwelling in the country to residing in cities. (Hor. l. iv. od. 5. v. 18. l. i. ep. 1. v. 3. Pers. Sat. v. v. 82.) According to Pliny, Lucullus, on his return from the war with Mithridates, proposed to erect a statue to Felicity from the chisel of Arcesilaus, but both died before its completion. Julius Cæsar also intended to erect a temple in honour of this divine protectress in the square of his palace in front of the Curia Hostilia, but it was finished by Lepidus. There were also other temples to her honour in Rome, one of which, that erected by Claudius, was reduced to ashes in a conflagration.

* The law runs thus: "Eos qui cœlestes semper habiti, colunto, et ollos quos endo cœlo merita collocaverunt, Herculem, &c. ast olla propter quæ datur homini adscensus in cœlum, mentem, virtutem, fidem, &c. eorumque landum delubro sunto. Tab. II. c. 4. Cic. de leg. l. 2. c. 8.

FELIX (AQUA) or AQUA FELICE. *In the history of architecture.* A fountain in Rome constructed by Pope Sextus V. It is generally supposed, on the authority of Baccius, a learned physician and antiquary of the sixteenth century, in his work *de Thermis*, that the waters which supply this fountain are a portion of the *Aqua Appia*, which is conducted from a distance of five leagues to the gate of St. Laurence on the Esquiline Hill, where it discharges itself on the Quirinal.

FEMALES. *In painting and sculpture.* Figures representing the opposite sex to man. The ancient artists had different standards of female beauty, both as related to their goddesses and their mortals. Homer is full of the beauties of his females, which have all different characteristics. The goddesses of the ancients, both as described by their poets and as represented by their artists, are endowed with more than mortal beauty. The Greeks, contrary to their practice with male figures, mostly represent their goddesses and females clothed. Their principal exception is that of Venus, who is abundantly clothed with resplendent beauty, and an utter unconsciousness of indelicacy.

As the goddess of beauty, Venus of course occupies the first place among them, and the Venus called de Medici is incomparably the most beautiful in the world. The Venus of the Capitol, and the Venus of Arles, rank the next. Venus was also frequently represented as the genius of indolence, lying in a languishing posture on a couch, and generally attended by Cupids to execute her orders. On an ancient sepulchral lamp described by Spence, she is yet more indolent; as not only herself, but the Cupids about her are all fast asleep. This is a just character, Indolence being the mother of Love in a moral sense, as Venus is of the Cupid in the allegorical sense.

Pallas or Minerva is represented as a beauty, but of the severer kind, and without the graces and softnesses of Venus. Dignity and a becoming air, firmness and composure, with just features and a certain masculine sternness, make the distinguishing character of her face. Hence her heads are so like those of Alexander the Great, that they are often mistaken for his.

Diana is endowed by the ancient artists with all the beauty of her sex, but with an appearance of ignorance of her charms. She is represented as tall of stature, ac-

tive, comely, well proportioned, and her face, though very handsome, somewhat masculine, and deficient in the softer winning graces or prettiness of Venus.

Juno is represented as a magnificent beauty, large and expressive eyes, full in form, resplendent in her attire, and commanding in her attitude and expression.

Ceres and Proserpina are delineated on medals of Magna Grecia and of Sicily, with the highest characteristics of beauty; according with the descriptions of the poets, as are most of the other goddesses and celebrated females of antiquity.

The ancient artists no doubt attempted a sort of ideal beauty in their portraits of eminently beautiful women, without destroying the similitude of the individual resemblance; as in the heads of Aspasia, Cleopatra, Julia the daughter of Titus, and other recorded beauties.

Among modern artists Raffaelle, Coreggio, Albano, and Guido have most excelled in representing the lovely beauty of females.

Ferrara (anciently *Ferraria.*) *In the history of art.* A city of Italy, the capital of the Duchy of Ferrara, situated on the north bank of the river Po. This city is surrounded by a fortified wall and broad ditch, which may be filled with water by means of a canal from the river. There are five gates, called the gate of St. Benedict, St. Paul, St. George, St. John the Baptist, and the gate of the angels; and at the south-west extremity there is a regular fortress. There are several squares, and the streets are tolerably wide and convenient.

The principal objects in the city of Ferrara are churches, convents, a few edifices for public purposes not ecclesiastical, and those belonging to private individuals; but of the first there is a very great superiority with regard to numbers. The metropolitan church, dedicated to St. George, the tutelar saint of the city, occupies one side the Piazza di San Crispino, the principal square. The antiquity of the edifice remounts to the year 1135, when it was completed and consecrated, and exhibits a specimen of the bad taste which pervaded the architecture of that period, intermixed with subsequent alterations. It contains many monuments, inscriptions, and statues. Among the last are five in bronze as large as life, ornamenting an altar representing the crucifixion, the Virgin Mary, and other sanctified persons. There are several of fine Carrara marble, of which one of the most conspicuous, and as large as life, was erected by the citizens of Ferrara, in honour of Albert, their sovereign lord, in 1393, who had repaired to the pope with a great cavalcade, and obtained two important bulls, sanctioning the erection of a university, and certain privileges regarding succession to property.

About the year 1506 a spacious edifice, the church of St. Benedict, was built by two native architects, towards the western part of the city, to which a monastery adjoins. Here are deposited the remains of the famous Italian poet Ariosto, in a marble mausoleum, executed by Nano, a Mantuan sculptor, with two inscriptions, one of which was composed by Guarini. This monument has attracted the notice of crowned heads in their visits to Italy, while the ashes of philosophers have reposed in neglected obscurity. Ariosto was a native of Ferrara, and his house is still shown as a curiosity to strangers. It bears two inscriptions, composed by himself and his natural son, a literary ecclesiastic. The former is in these words, *Parva, sed apta mihi, sed nulli obnoxia, sed non sordida, parta meo sed tamen aere domus*, certainly neither very elegant nor poetical: the latter is, *Sic domus hæc Ariosta propitios habeat deos olim ut Pindarica.* The house was built by him, and he died there on the sixth of June, 1533. In the monastery annexed to the church of St. Benedict are preserved some important archives.

Festoon. [*feston*, Fr.] *In architecture and sculpture.* An ornament of carved work in the form of a wreath or garland of flowers, fruit, or leaves twisted together, and suspended by the two ends. Festoons have also been composed of hunting pieces, of fishing, of music, and other articles of art and manufacture, but they are in general inferior in taste to those which are composed of fruits, flowers, and foliage.

Fibula. [Lat.] *In the archæiology of painting, sculpture, and architecture.* A button or buckle of a shoe, a clasp, a brace to fasten beams, a cramp. The fibulæ of the ancients were of different forms, often representing various animals, or portions of animals, a lyre, &c. Fibulæ are often found in the tombs of the ancient Romans, Gauls, Francs, and the ancient Britons. Many antique fibulæ of bronze are to be found in various cabinets and collections of antiquities, and a few in the British Museum, among other articles of the toilet or of personal decoration.

Fictile. [*fictilis*, Lat.] *In sculpture.* Vases, figures, &c. formed of clay. See Vase.

Fictor. [Lat.] *In ancient art.* An artist who models or forms statues and reliefs in

clay; called by the Greeks Πλάστης, whence the word *plastic*. See PLASTIC. These works are called fictile.

FIDELITY. [*fidelitas*, Lat.] *In the mythology of art.* The goddess of honesty, or fidelity, one of the moral deities of the Romans who presided over the virtues of men, and the conduct of human life. This deity was one of those to whose honour the Romans were enjoined in the laws of the twelve tables to erect altars. See note to the article FELICITY. She was represented with an erect open air, and clad in a thin transparent dress. The poets called her blameless and incorrupt, and the companion and sister of justice. They also in some places represent her as gray headed and very old, but not so on her figures as found on antique medals. See HOR. l. i. od. 35, v. 22; od. 18, v. ult; od. 24, v. 7. ILL. ii. v. 484. ÆN. i. v. 293. When they promised any thing of old they gave their hand upon it, as we do now, and therefore she is represented as giving her hand, and sometimes as only two hands conjoined (see Val. Max. lib. vi. c. 6), as on medals of Marcus Antonius, Vespasian, Titus, Balbinus, Pupienus, &c. On others she is portrayed holding in one hand a patera, and in the other a horn of plenty, a caduceus, an eagle, or other symbol. The inscriptions on these antique medals are generally *fides publica, fides senatus, fides Romanorum, fides exercitus, fides prætorianorum, cohortium, legionum, militum*, &c.

FIGURE. [*figura*, Lat.] *In all the arts.* The form of any thing as terminated by the outline; a statue, an image, representation in painting, form of building. See PAINTING, SCULPTURE, and (particularly) DRAWING.

FILICATÆ pateræ. *In ancient sculpture.* A species of patera ornamented with scrolls of fern, vine leaves, &c. See ACANTHINÆ.

FILIGRANE, FILIGRAME, or FILLAGREE. [Fr. from *filum* and *granum*, Lat.] *In decorative sculpture.* A kind of ornamental work, in which flowers, &c. are formed of fine gold and silver wire, curled or twisted in a serpentine form, and sometimes plaited and worked through each other, and soldered together.

This art appears to have been brought to Europe from the East, and has been occasionally employed in all ages. Such of our readers as wish farther particulars on this subject are referred to the following works, quoted by Beckman in his *History of Inventions*, vol. ii. p. 245—247.

Halle's *Werkstate der Kunste*, i. p. 101; Jacobson, *Technologisches Worterbuch*, i. p. 721. Grignon, *Bulletin des fouilles d'une ville Romaine*, i. p. 22; Menage, *Dictionnaire Etymologique*, i. p. 597: J. H. Jungius, *Disquisit. de Reliquiis*; accedat Lipsanographia sive Thesaurus reliquiarum Electoralis Brunsuico-Luneburgicus, Hanov. 1783, 4to. p. 19, 29, 56; Marsden's *History of Sumatra*, Lond. 1783, p. 145; Der Mistress Kendersley, *Briefe van der Insel Teneriffa und Ostindien*, Leips. 1777; Thos. Reiseund, *Lebensbeschreiburg*, Augsb. 1788; and Von Stetten, *Kunstgeschichte*, i. p. 489, and ii. p. 287.

FILLET. [*filet*, Fr.] *In architecture.* A little plain member, used to separate ornaments and mouldings, named from its place, either *fillet, annulet, listel, band*, &c. See those words.

FINIAL. [from *finio*, I terminate, Lat.] *In architecture.* The knot or bunch of foliage or flower that forms the upper extremities or finishing point of pinnacles in Gothic architecture. Sometimes used for the pinnacle itself. See PINNACLE.

FINISH. [from *finir*, Fr.] *In all the arts.* A working up or bringing to the end proposed; a completion of a picture, statue, building, plate, or other work of art. More particularly the last and masterly working up to a proposed degree of perfection. Small and delicate works require a different sort of finish than larger and bolder; and what is but *finish* in the one is *labour* in the other. The Flemish masters are celebrated for the high finish of their works in painting, as was Canova and his school in sculpture.

FLAMBEAU. See TORCH.

FLAME. [*flamma*, Lat.] *In sculpture.* An ornament representing the light which is emitted from fire; used to decorate funeral monuments, as representing the uncertainty of human life. Wren has used it on the top of his gigantic column called the Monument, as being commemorative of the great conflagration of the city.

FLAMEN. [Lat.] *In the archaiology of the arts.* A high priest among the Romans appointed by Numa to assist the kings who, till his time, had held the office. He appointed one for each of the chief deities, who bore the name of the god to whose service they were dedicated; Jupiter's was called *flamen dialis*; Mars's *flamen martialis*; and the *flamen* of Jupiter was the most honourable, therefore he wore a white hat, with a purple gown called *trabea*, which was the costume only of the gods, kings, and augurs.

FLAMMEUM. [Lat.] *In antique costume.* A veil or garment of orange or flame co-

lour, worn by the wife of the *flamen dialis*, when she officiated as priestess and assisttant to the flamen.

FLAMMEOLUM. [Lat.] *In antique costume.* A little veil or scarf of flame colour, wherewith the bride's face, in the Roman marriage, was covered. That colour being sacred to Hymen, hence the brides were called *flammearii*, Nubentes, flammeo velabantur. See PLINY, l. xxi. c. 8.

FLANK. [*flanc*, Fr.] *In architecture.* The side of a temple or building.

FLEMISH SCHOOL. *In painting.* One of the grand divisions in the classification of painters, named from Flanders, the country of their birth or practice. RUBENS is the principal master of this school, which to brilliancy of colour and the magic of chiaroscuro, added a great knowledge of design, grandeur of composition, and, in portraits, a striking air of nature, with a noble expression. Yet, on the whole, it only produced a sort of individual or natural beauty (see DRAWING), partaking neither of the elevation of sentiment or ideality of the antique, nor of the Italian mode of representing nature. See SCHOOL.

FLEXIBILITY. [*flexibilité*, Fr.] *In painting and sculpture.* The quality of appearing able to be bent, ductile, pliable, suppleness, the contrary of stiff. Flexibility in art is acquired only by a correct and close study of nature, from correct and free models. Rubens is a celebrated instance of flexibility in painting, and the Elgin marbles in sculpture; which are the only marbles in existence whose apparent flexibility equals flesh itself, the skin of the Theseus actually appearing ready to slip at the touch upon the muscles.

FLOOR. [flope, Sax.] *In architecture.* The pavement or layer of boards, &c. that forms the bottom of a room; a story, a suit of rooms.

FLORA. [from *flos*, Lat. a flower.] *In the mythology of art.* The goddess of flowers and of gardens; the wife of Zephyr, whose loves have often been the theme of the the poet's song. She was originally a field nymph, and called Chloris (from χλόος a flower.) In a statue at Florence she is almost naked, and is distinguished by the little nosegay which she holds up in her hand as pleased with its beauties. Sometimes she is crowned too with flowers, and sometimes has a chaplet of them in her hands. She has only a light veil; but in the famous Farnese figure of her she is fuller dressed. Her robe was of as many colours as the flowers with which she was fully adorned. Ovid gives a delightful description of her garden, with the Floræ gathering flowers, and the Graces making garlands of them.

Fast. v. v. 360. Fast. v. v. 200. This garden of Flora seems to have been the paradise in the Roman mythology. The traces of paradise were derived to the Romans from the Greeks. Among them this idea was shadowed out by the gardens of Alcinous. In Africa they had the gardens of the Hesperides; and in the East the Horti Adonis, which term was used by the ancients for gardens of pleasure. Plin. l. xv. c. 4.

FLORENCE. [*Florentia*, Lat.] *In the history of the arts.* An ancient and celebrated city of Italy, built by L. Sylla the dictator in the year U. C. 645. It is situated on the banks of the river Arno, and is distant one hundred and fifty miles from Rome, and about sixty from the shores of that part of the Mediterranean called the Mare Inferum, or Tuscan sea.

The city itself spreads along the side of the river, which forms one of its greatest ornaments. It has several squares, and many churches and palaces, so that its appearance is airy, clean, and sometimes rising towards grandeur.

The first edifice which arrests the attention of the traveller is the cathedral (commonly called in Florence *Il Duomo*), a building of great extent and magnificence, and in boldness and skill inferior only to St. Peter's at Rome. This building is four hundred and twenty-six feet in length, and three hundred and sixty-three in height. It is completely cased with polished black and white marble, and the interior paved with variegated marble, part of which was arranged by Michel Angiolo.

Its most remarkable feature, however, is the cupola, which was raised under the directions of Filippo Brunelleschi, the most celebrated architect of the fifteenth century. The dimensions are within a few feet of the cathedral of St. Peter's; and as it is prior to it in date by nearly a century, and was always the peculiar object of Michel Angiolo's admiration, it may be fairly concluded that the plan of the Roman edifice was at least in part suggested by the Florentine.

But, in many respects, the inferiority of the latter is undeniable. The octagonal shape less simple, has consequently less grandeur than the circular, and, from being closed at the top, there is a want of light to illuminate the vast vault below. This is indeed the general defect of the church, the windows being small, and the

little they admit diminished by the deep and rich colours of the painted glass. Such at least is the opinion of Italian critics, though to British eyes, accustomed to associate ideas of sublimity with the gloomy grandeur of our Gothic cathedrals, these very defects will appear to be excellences. The statues which adorn the church both within and without are most of them the works of the most eminent sculptors, and a few of the pictures are of the first rate of excellence. Among the most remarkable of the former are the statue of Brunelleschi, and those on the altar the production of Baccio Bandinelli and Michel Angiolo, Of the latter, those in the interior of the cupola, by Zucchero and Vasari, and the portraits of Danté and Giotto are most worthy of attention; the first for their intrinsic beauty, and the others on account of the distinguished characters to whose memory they are consecrated. Detached from the church stands the campanile or belfry, a light and elegant tower, incrusted with variegated marble, and, like the church, adorned with statues. The general baptistery of the city, which fronts the principal entry of the church, is also an octangular building of great magnificence. It is chiefly remarkable for the bassi rilievis which adorn its three great bronze portals. They are the work of Andrea Ugalini of Pisa, and Lorenzo Ghiberti, and were so highly admired by Michel Angiolo, that he declared them worthy of being the gates of Paradise. Before the principal gate of the baptistery are two columns of porphyry, on which are suspended the immense chains with which the Pisans, in 1406, attempted to close up their harbour against the Florentines and Genoese, and which were afterwards brought to Florence as a trophy of victory.

The next and, indeed, the only other church which deserves a particular description, is that of San Lorenzo, in the northern part of the city. This also was designed by Brunelleschi, but is, both in design and magnificence, inferior to the Duomo. It has, however, attained to high celebrity from two buildings attached to it, the Sacristy and the Medicean Chapel. The first was one of the earliest works of Michel Angiolo, and is decorated with seven statues by the same artist; and although most of them are unfinished, yet the eye of the connoisseur will easily discern in them the genius and boldness of design, which so eminently characterize the productions of that great sculptor.

The chapel which adjoins the back of the church was began in 1604 by Frederick I. Grand Duke of Tuscany, who intended not only to have removed thither the mausolea of his ancestors, but was in treaty to purchase the holy sepulchre at Jerusalem. The plan of the building was every way worthy of the purpose for which it was intended. "Its form is octagonal, its diameter ninety-four feet, and its elevation to the vault two hundred feet. It is literally lined with lapis lazuli, jasper, onyx, &c. furnished with sarcophagi of porphyry, and supported by granite pilasters, with capitals of bronze. The niches between these pilasters are of touchstone; beneath is a subterraneous chapel, where the bodies, whose names are engraved on the sarcophagi above, are to repose. The crucifixion of our Saviour, a group in white marble, by Giovanni da Bologna, with a statue of the Virgin Mary, by Michel Angiolo, and St. John by one of his pupils, "grace this dormitory of the dead, and preside over it with appropriate majesty. But before the magnificent monument intended for their reception was finished, the Medicean line has failed; the work is now suspended; and, if we may judge from the impoverished state of the country, it is not likely to be resumed for many years if ever. The Laurentian library, which is in the convent annexed to the church, is a collection of valuable manuscripts, first formed by Cosmo and Lorenzo di Medicis, and considerably increased by Leo X. and Clement VII.

The palaces of Florence are remarkable for a style of architecture peculiar to themselves, to which the long civil wars in the thirteenth century between the Guelph and Ghibelline families first gave rise. The Palazzo Strozzi and the Palazzo Riccardi, the latter of which was built by the great Cosmo de Medici, are curious specimens of this style. They are square, heavy, solid masses, whose strength is their principal ornament. The walls are thick, and broken by few windows, and these of a very diminutive size, and the whole basement fortified with large unhewn masses of stone. The upper stories are faced with freestone, and the whole is crowned with a very heavy projecting cornice.

In those palaces, which are the property of private persons, there are many pictures and statues by the best masters. Of these the collections in the Riccardi and Gerini palaces are the most valuable. The Palazzo Vecchio and Pitti, the residences of the grand dukes, and more lately of the King of Etruria, were completely stripped of their pictures and statues by the French, and the only monuments of art that now

adorn them are their painted cielings, which it was impossible for the rapacity of the invaders to remove. But of all the collections of the works of art, no one has acquired so high a reputation as the Medicean gallery. This magnificent building was erected by Cosmo I. in the year 1564; but the greatest part of its contents were collected in the succeeding century by the Cardinal Leopold di Medici, son of Cosmo II. and many additions were made by the Princes of Lorraine and Austria. The busts of the Medicean princes and other contributors to the gallery adorn the vestibule, and, like the tutelar deities of the place, seem to claim from the passing traveller the homage due to their magnificence. The gallery or corridor is in the shape of a Greek Π, of which the two wings are each four hundred and thirty feet in length, and the intermediate part ninety-seven. The paintings and statues in the gallery are arranged in series of Florentine portraits, of illustrious foreigners, of paintings, &c. and the busts of all the Roman emperors and their families, from Julius Cæsar to Constantine. The corridor is bordered on one side by a suite of halls or cabinets, each of which is consecrated to some set of masterpieces either in sculpture or painting, or collections of antique and modern medals, coins, gems, &c. Of the former, however, many of the most celebrated now grace the galleries of the Louvre, and the hall of the far famed Venus de Medici is now a temple bereft of its divinity. Of those that remain, the most remarkable is the group of Niobe and her children; it consists of sixteen figures, which are generally considered as models of the highest perfection; although it is a subject of debate among critics, whether this group be a copy or the original, which is ascribed by Pliny, the elder, to the chisel of Scopas or Praxiteles.

A minute description, however, of this celebrated collection would exceed our limits; and we must refer our readers for this and the account of the Natural History Museum to the *Museum Florentinum*, the *Panorama of Florence*, and similar publications. Also for general accounts of the city to the article FLORENCE in BREWSTER'S *Cyclopædia*, GWILT'S *Notitia Architectonica Italiana*; *Le Pittore di Firenze*, and many other similar works.

FLORENTINE SCHOOL. *In painting.* One of the great schools of Italy, of which those of Florence, Rome, Venice, and Lombardy are the most eminent. They are characterized from the manners adopted, and in a great manner established, by the masters who founded them. The *Florentine school* is the mother of all the rest, and is distinguished by an austerity and grandeur, which gives an elevation and majesty to the compositions of its artists superior to all others. See SCHOOL, PAINTING.

FLOWERS OF FLOWER PAINTING. *In painting.* A representation of that part of a plant which contains the seeds. The art of painting flowers is one of the most interesting and beautiful in the department of imitative art. A knowledge of botany, in all its branches, a correct eye, a practised and light hand, a consummate knowledge of colours, a delicate pencil, high finish, taste, and a tact for arrangement, are but among the requisites for a painter of flowers. Van Huysum, Varelst, and two or three others among the names at the close of this article, elevated this art above the mere botanical copyist, and one of its practitioners obtained the flattering name of the *Michel Angiolo da fiori.*

Among the ancients, according to Pliny, flowers were used symbolical of Spring; and upon many medals which represent this happy season of the year, by four children or genii, that of Spring always carries a basket filled with flowers. Hope is also figured by the ancient artists and poets holding a flower in his hand. Venus is sometimes so represented or crowned with a garland of flowers. Persons conveying good news crowned themselves also with flowers to indicate the happy tidings of which they were the bearers. They cast flowers in the paths of those whom they would honour, as is still the custom on coronations and important marriages. Lovers ornamented with festoons and garlands the houses of their mistresses. They were also carried in the Floralia, as is our custom still on May Day. They also crowned with flowers the victims which were led to sacrifice, virgins when going to be married; and they also decorated the tombs of their beloved and honoured kindred with flowers, which they renewed on the anniversary of their departure from this world, as is still the custom in Roman Catholic countries, and in some of our country village burial grounds.

The selection of the flowers, and the manner of arranging them into garlands, constituted an art among the ancients, which had its rules and regulations, in which the females particularly excelled in communicating their sentiments by a garland, as the oriental nations of the present day have in communicating a love letter in a bouquet, as Lord Byron emphatically

expresses it in his address to a young Greek:

> "By all those tokens, *flowers*, that tell
> What *words* can never speak so well,
> By love's alternate joy and woe,
> Ζωὴ μοῦ σας, αγαπῶ.

Many epigrams in the Anthology (ἄνθολογία, a collection of *flowers*) make us acquainted with the names of the flowers which they mostly used in forming these crowns and garlands, and the significations of many of them. It was not only the colours, but also the odour of each flower, that governed this symbolical language. In the Ὀνειροκρίτας, or Book of Dreams of Artemidorus, are many explanations of the symbolical meaning of a list of flowers which go to the formation of a chaplet or garland.

Flowers also among the ancients contributed to the festivities and joyousness of the banquet. The revellers wore chaplets or crowns of flowers upon their heads and round their necks; the perfumes of which were not only agreeable, but reckoned antidotes against intoxication. They also crowned their goblets with wreaths of aromatic flowers. Many physicians of antiquity, particularly Mnesitheus and Callimachus, wrote treatises on the medical virtues of chaplets of flowers worn about the head.

Flowers have been used in all times as ornaments and perfumes in houses, preserved in vases or goblets with water. Upon many ancient medals, particularly the Byzantine, flowers are displayed as used in the present inelegantly formed vases.

Among the early Christians flowers were regarded symbolically as representing gifts of the Holy Spirit. On this account it was that at the feast of Pentecost or Whitsuntide, the priests cast flowers from the upper ambulatories of their churches upon the congregation of the faithful assembled in the nave below; a custom which is still continued in Catholic countries, with the decoration of the churches, with flowers according to the season, both at Christmas and at Whitsuntide, which is observed also in many English protestant churches. Flowers were also held by Catholics as symbolical of the delights of paradise, and were accordingly figured upon the glasses of the early Christians; many representations of which are engraved in the works of Buonarotti.

To represent these beautiful and delightful works of nature in painting requires that delicacy, finish, lightness, and taste, which is so peculiarly adapted to females, and many of that sex have consequently succeeded in their execution. Our present school is rich in female talent in this beautiful line of art. Among whom are Mrs. Pope, Mrs. Kearse, Mrs. Dighton, Miss Storer, and others whose names are not immediately remembered.

Among the most celebrated flower painters, whose works are worthy the notice of the connoisseur and student may be cited, of the Florentine school, Angiolo Gori, Bartolemeo Bimbi, a disciple of Lippi, Andrea Scacciati, Fortini, and, above all, Gaspar Lopez, a Neapolitan by birth. In the Roman school, Tommaso Salini, Mario Nuzzi, surnamed Mario da Fiori, Laura Bernasconi, Michel Angiolo da Campidoglio, called Michel Angiolo da Fiori, Pietro Paolo Bonzi, called sometimes Il Gobbo da Cortona, from Cortona his native place, at others Gobbo di Caracci, and sometimes Gobbo da Frutti, for his excellence in painting fruit, Carlo Voglar, surnamed Carlo da Fiori, who also was excellent in dead game and still life, Francesco Varnetam, Christiano Bernitz, and Scipione Angeli. In the Neapolitan school we find, as celebrated in flowers and fruit (see FRUIT), Andrea Ruoppoli, called Andrea da Belvedere, who had many pupils; among them are the beforementioned Gaspar Lopez. Among the painters of the Venetian school mentioned as excelling in flowers, are Domenico Levo of Verona, Caffi, Duromano, Count Giorgio Durante of Brescia, who was likewise very much admired for the beauty and nature of his birds, and other highly finished subjects of natural history. Of the modern school, Ridolfo Mazzoni, of Castelfranco, Ludovico Bertucci, Pelegrino Ascani, Felice Rubbiani, Carlantonio Procaccini, Maderno and Mario of Crespini. The Bolognese school has also produced some excellent flower painters, as Antonio Mezzadri, of whose pictures there are many in Bologna, Anton-Maria Zagnani, Paolo Antonio Barbieri, Pietro Francesco Cittadini, surnamed Il Milanese, after the place of his birth, a pupil of the celebrated Guido. The Low Countries have not been behind in either the number or the excellence of their flower painters. Among others may be reckoned Simon Varelst, Gerard Seghers, De Heem, and Van Huysum, all of first rate talents, and whose pictures are highly esteemed, particularly those by Van Huysum. France has also produced her complement of flower painters, and reckons among her best, Redouté, Van Spaendonck, Van Pol, Vandael, Chazelles, Bonneval, &c.; and among her female artists in this

fascinating line, Madame de Montesson, Madame Valayer Coster, and Mademoiselle Millet Moreau.

FLUTES. [Fr.] *In architecture.* Channels or furrows cut perpendicularly in the shafts of columns. Fluting the shafts of columns is a practice never omitted in any great and finished Grecian work; it therefore seems probable, that it had some relation to the original type, perhaps the furrowed trunk might have suggested the idea. It is, however, a beautiful ornament, which is applied with equal happiness to break the otherwise heavy mass of a Doric shaft, or to obviate an inconsistent plainness in the other orders.

FOLD. [ꝼalð, Sax.] *In painting and sculpture.* A double, complication, one part lapped over another in drapery. See DRAPERY, DRAWING.

FOLIAGE. [from *foliatus*, Lat.] *In architecture and sculpture.* An assemblage of leaves of plants and flowers, arranged systematically, so as to form architectural and sculptural ornaments; as in the capital of the Corinthian order, friezes, panels, &c.

FONT. [*fons*, Lat.] *In architecture and sculpture.* A vessel of marble or stone in which the water for Christian baptism is contained, in the church or baptistery. See BAPTISTERY. Great Britain can boast of many very extraordinary fonts highly interesting to the ecclesiastical antiquary. That of Bridekirk in Cumberland, is allowed to be of Danish origin; and that which was recently removed, in the spirit of modern *improvement*, from the church of St. Peter in the East, Oxford, exhibited proofs of an antiquity nearly as early. The font in St. Mary's church, Lincoln, dated 1340, is handsome and of good proportions, as is the elaborately sculptured one in Winchester Cathedral. Two of uncommon height are engraved in KING's *Vetusta Monumenta*, and a great variety in the *Archaiologia* of the SOCIETY OF ANTIQUARIES. That singular inscription which, read backwards or forwards, has the same words, occasionally found on the walls of many baptisteries, occurs also very frequently on ancient fonts:

NIΨON ANOMHMATA MH MONAN OΨIN.

and is certainly the happiest instance of that species of composition called *amphisbenæ*, a fabulous serpent which had two heads, and could advance either way.

FOOT. [ꝼoτ, Sax.] *In all the arts.* A measure of length divided into twelve inches. The ancient Roman foot from .965 to .970 of the English foot. The Roman mile of Pliny equalled 4840 feet 6 inches English. A few of the foreign measures of length, taken from a table in GWILT's *Notitia Architectonica Italiana*, may be useful in reducing foreign dimensions of pictures, statues, or buildings to English measures. English foot, 1.000; the *Ancona* foot is 1.282 English; *Bergamo* foot, 1.431; *Bologna* foot, 1.244; *Brescia* foot, 1.560; *Brescia* braccio, 2.092; *Chambery* foot, 1.107; *Ferrara* foot, 1.317; *Florence* foot, .995; *Florence*, braccio, 1.905; *Genoa* palm, .812; *Genoa* canna, 7.300; *Geneva* foot, 1.919; *Leghorn* foot, .992; *Lucca* braccio, 1.958; *Mantua* brasso, 1.521; *Mantua* braccio, the same as at Brescia; *Milan* decimal foot, .855; *Milan* braccio, 1.725; *Modena* foot. 2.081; *Naples* palm, .861; *Naples* canna, 6.908; *Paris* foot, 1.066; *Paris* metre, 3.281; *Parma* foot, 1.869; *Pavia* foot, 1.540; *Piacenza*, same as the Parmese; *Rhinland*, 1.023 to 1.030; *Rome* palm, .733; *Rome* foot, .966; *Rome* deto, $\frac{1}{16}$=.0604; *Rome* oncia, $\frac{1}{12}$=.0805; *Rome* pamo, 2.515; *Rome* palma d'architettura, .7325; *Rome* canna d'architettura, 7.325; *Rome* braccio, 2.561; *Siena* foot, 1.239; *Trent* foot, 1.201; *Turin* foot, 1.676; *Turin* ras, 1.958; *Venice* foot, 1.137; *Verona* foot, 1.117; *Vicenza* foot, 1.136. The ancient Greek foot is eleven inches .875 of the English foot.

The ancient Roman measures, according to Julius Frontinus, were divided into several intervals and proportions; "Mensura," says this author, "est complurium, et inter se æquatium intervallorum longitudo finita." Thus their foot was measured by the inch, the pace by the foot, the stadium by the pace, and the milliaria by the stadium. He adds, that the Romans had twelve sorts of measures which they called "digitos, uncias, palmos, sextantes, seu potius dodrantes, pedes, cubitos, gradus, passus, decempedas, actus, stadia, miliaria." He also gives the digit as the smallest measure used in the admeasurement of land. "Digitus enim est pars minima agrestium mensuarum."

The following Latin verses sum up the mode:

"Quatuor ex granis digitus formabitur unus,
Est quater in palmo digitus, quater in pede palmus.
Quinque pedes passum faciunt, passus quoque centum,
Quinque et viceni stadium dant: sed milliare
Octo dabunt stadia, duplicatum dat tibi leucani."

To ascertain the correct measurement of the Roman foot, and other ancient measures of length, Pope Bededict XIV, about the year 1748, collected together, in the museum of the Capitol, all the ancient monuments that he could procure that had

Roman feet engraven upon them. Such as those of Cossutius, Statilius, Æbutius, &c. which are all delineated in the fourth volume of the Museum Capitolinum. In the Vatican Library is an ancient Roman foot in bronze extremely well preserved; and M. Grignon, a French antiquary, discovered one which was divided into four quarters, and again into sixteen digits.

Foot, the human. *In painting and sculpture.* The lower extremity of the human body; the part whereon human beings stand. See Extremity, Drawing.

Foreshortening. *In painting.* The art of representing figures and other objects, projections, &c. as they appear to the eye. This art, which, in many instances, is so difficult, appears to have been known to the Greeks, and Pliny speaks particularly as to its being successfully practised by Parrhasius and Pausias. Among the moderns, Coreggio must be allowed the palm for excellence in foreshortening. See Perspective, Cieling.

Form. [*forma*, Lat.] *In all the arts.* The external appearance of bodies; the essential, specifical modification of the matter, which gives it its peculiar manner of existence. Form in art, as well as in nature, is the quality that distinguishes one object from another. In painting the word *form* is specially applied to the human form. In architecture it relates to the proportions of buildings; and beauty of form in that art is as essential as either in painting or sculpture.

Fortitude. [*fortitudo*, Lat.] *In the mythology of the arts.* One of the moral deities of the Romans, whose worship is enjoined in the laws of the twelve tables. A deification of courage, bravery. Upon a common medal of Hadrian, Fortitude is represented with an erect air, resting on a spear with one hand, and holding a sword in the other. She has a globe under her feet, to show that by her the Romans were to conquer the world. From their military dispositions, they gave Fortitude the name of Virtue, or *the virtue*, by way of excellence, by which they understood not only military courage, but a firmness of mind and love of action; a steady readiness to do good, and a patient endurance of all evil. Cicero (Tusc. quæst, lib. ii. p. 392; l. v. p. 501; de Nat. Deor. l. i. p. 23) speaks of *Virtus* and *Fortitudo* as the same thing, and that it includes a love of action.

Fortune. [*fortuna*, Lat.] *In the mythology of the arts.* Another deification by the Romans, of the virtue or power which they supposed distributed the lots of life according to her own humour. Fortune was also thought to direct the events of human life. She was looked upon by the wise as a usurper, and as such placed in heaven only by the populace, who applied to her at last in all their wants. At the same time she was represented by the poets as a divinity that could not deserve much respect. Juvenal (sat. x. v. ult.); Ovid (ad Liv. v. 374), speaks of her as blind; Horace (l. i. od. 54, v. 26) as inconstant; and in another place (l. iii. od. 29, v. 51) as delighting in mischief; and Statius (Theb. xii. v. 505) as unjust. Cybele, on an antique gem, turns away her head from Fortune, in the attitude of rejecting her. See Pliny, lib. ii. c. 7. Fortune is represented by Ovid (ad Liv.) as standing on a wheel, but more generally with wings, and a wheel by her side, to show her inconstancy, and sometimes with a wheel only, to show she presided over the expeditions of the emperors, and their happy return. She is then called on medals *Fortuna redux*. Her usual attributes are the cornucopia, as the giver of riches, and the rudder in her hand, often rested on a globe, as directress of all worldly affairs.

The incoherences in this goddess's character caused several distinctions. The Romans had a good and bad, a constant and inconstant, Fortune. The *bona Fortuna*, according to Horace, is dressed in a rich habit; and the *mala Fortuna* in a poor one. *Fortuna manens*, or the constant Fortune, is without wings, and sitting in a stately posture. She has a horse as an animal of swiftness, which she holds by the bridle. Inconstant Fortune is winged as ready to fly away. Horace (l. i. od. 35, v. 34; l. iii. od. 29, v. 56) speaks of both as deserving the favour of one, and as being above the power of the other. The Fortune worshiped at Antium seems to have been of the most exalted character among the Romans. In a solemn procession to her honour, alluded to by Horace, the statue of Necessity was carried before her, and after her those of Hope and Fidelity.

Forty Columns (the). *In architecture.* See Persepolis.

Forum. [Lat. Φόρος, Gr.] *In ancient architecture.* A market place where things are sold; also where the Roman courts of justice are kept, and matters of judgment pleaded and decided. The Greeks, says Vitruvius, made their forums or agorai square, with large double porticoes; the columns close together, adorned with stone or marble cornices, having ambulatories in the upper stories: but the Romans did

not follow the same method; for by ancient custom, the shows of gladiators were given in the forum: for this reason the intercolumniations around the area were made wider. In the surrounding porticoes the shops of the bankers were disposed, with galleries in the upper floors properly adapted for the use and management of the public revenue. The proportion of a forum was one third longer than broad. Adjoining the forum, on the warmest side, was the *basilica;* where were large covered halls, with galleries supported by elegant columns. In these galleries were shops, where were sold the finest wares; in the middle was a large place for the convenience of merchants and men of business; at one end was the *tribune,* where causes were heard, and other public business transacted. In parts of this building also the lawyers or counsellors had apartments. These structures having frequently been converted into Christian churches, they from them have obtained the name of *basilicæ.* See BASILICA.

The agorai of the Greeks were ornamented with statues of their gods and heroes, and frequently with monuments erected to the memory of celebrated men. Most of the cities of Greece were embellished with splendid agorai or fora. Pausanias enumerates and describes several. Among the agorai of Athens, two are spoken of by ancient authors as surpassing the others in extent, beauty, and decorations. One was in the Ceramicus, and the other in that part of the city that was called Eretria. It was planted with walks of plane trees, and divided into markets, streets, and porticoes, which derived their names from the objects sold in them. The senate occasionally assembled in one hall within it; the prytanes dined in another, and a temple to the mother of the gods, and altars to the twelve gods, to Pity, Modesty, Fame, and Impetuosity, attracted sacrificers. The council of five hundred also assembled in this agora, and their hall was ornamented with statues of Jupiter, Bulaios, of Apollo, and of Demos, the deification of the Athenian people. The city of Sparta had also a remarkably splendid agora, where the assemblies of their elders and their council of five hundred were held. Near to this building was the residences of the ephori and the bidiai or legislators. It contained also within its circuit temples dedicated to Cæsar, to Augustus, to Tellus, Jupiter Agoraicus, Minerva Agoraia, Neptune Asphalius, Apollo, Juno, and the Parci. It was also ornamented with statues of Apollo Pythaieus, Diana, Latona, Mercury Agoraieus, Jupiter Xenius, Minerva Xenia, &c. The agora or forum of Megalopolis was also another celebrated Grecian work. Among its buildings was a splendid portico erected in honour of Philip, and called the Philippeium; and another erected by a private citizen of the name of Aristander, and from him named Aristandreium. Among other celebrated Grecian agorai were those of Corinth, Argos, Methena, Gytheium in Laconia, Thespia in Bœotia, Tegea in Arcadia, Elatea, Elis, Coronia in Messenia, and on the authority of the fourth oration of Cicero against Verres, all the chief cities in Sicily.

Rome contained seventeen fora, of which fourteen were used for the show and sale of goods, provisions, and merchandise, and were called *Fora Venalia;* the other three were appropriated for civil and judicial proceedings, and called *Fora Civilia et Judicialia.* Of the latter sort was the celebrated Forum of Trajan.

The most extensive and beautiful of all the Roman fora was that called the *Forum Romanum,* now the *Campo Vaccino.* It was situate between the Mons Capitolinus and the Mons Palatinus, and was originally called the Forum Vetus, or simply the forum by way of excellence. It was for a long time the only forum in Rome, but as the population increased another became requisite, when Julius Cæsar built that which bore his name.

The *Forum of Julius Cæsar* was far more splendid than the *Forum Romanum;* it cost upwards of eight hundred thousand pounds sterling, and stood in the neighbourhood of the Campo Vaccino, to the east of the temples of Peace and of Antoninus and Faustina.

In the vicinity of that last named was the *Forum of Augustus*: the temple of Mars bis Ultor decorated the centre of it.

The *Forum of Nerva*, called also the *Forum Transitorium,* begun by Domitian, was decorated by Alexander Severus with colossal statues of the emperors, some of which were equestrian. Parts of this forum are still in tolerable preservation.

The *Forum of Trajan*, which has lately been accurately traced by means of very extensive excavations, and the demolition of a great number of houses, was by far the most magnificent. The Trajan column formed one of its ornaments, the architect was Apollodorus, and its situation was between the Forum of Nerva and the Capitol.

Other of the Emperors of Rome also signalized themselves by building fora for

the people, as Vespasian, Domitian, Severus, Antoninus, &c. Among the other fora were the *Forum Boarium*, named from a bronze statue of an ox which decorated its centre, and also from being the ox market; the *Forum Cupedinis*, named after a Roman named Cupes, was the market for meats, poultry, &c.; the *Forum Olitorium* or herb market; the *Forum Piscarium;* the *Forum Pistorium;* the *Forum Suarium*, &c. Many modern architects and antiquaries have exercised their talents and ingenuity in the restoration of the Roman Fora, from their ruins and the accounts of their historians. The best for the student's reference are PERRAULT, GALLIANI, PALLADIO, PIRANESI, &c. M. DURAND has collected several in his excellent *Parallel d'Architecture.*

FOUNDATION. [*fondation*, Fr.] *In architecture.* The basis or lower parts of the edifice. There is no part of the art of building that requires more attention and care from the architect than the foundation; it therefore demands, of necessity, peculiar study in the student who desires to become an able and efficient architect. The ancients are our best masters in this department of the art, and have left both precept and example for our guidance. SIR HENRY WOTTON, an able commentator on Vitruvius, in his excellent little manual, the Elements of Architecture, says, "First, then, concerning the foundations, which requireth the exactest care; for if that happen to dance, it will mar all the mirth in the house."

As an elucidation of this most important branch of practical architecture, the opinions and principles or systems of the old masters shall be first collected, accompanied by a few illustrative observations; and then summed up with what in my opinion are the best methods of constructing foundations for public and private edifices, and on various soils; according to the practice and the materials commonly adopted and used in this country, as far as regards solidity in the choice of a good natural foundation, proper materials to work with, and their most judicious application.

The first in chronological order who has written on the subject is VITRUVIUS, who leaves much to the discretion of the architect, his directions being very general. Discoursing of the construction of walls and towers, he says (lib. 1. cap. 5.), "When therefore the situation chosen for the city was found to be salutary, the soil fertile, yielding food sufficient for the sustenance of the inhabitants, and the approaches easy, having the accommodation of a river or seaport to expedite the carriage of goods to and from the city, then the foundations of the towers and the walls are to be thus constructed: the ground is to be dug down to the solid earth, and in the solid so far as seems reasonable for the magnitude of the work. The foundation walls are to be thicker than those which are built above ground, and they must be executed in the firmest manner."

Farther on he is rather more particular, laying down as a rule, that the walls under the columns on the footings of the foundations should be thicker by half than the superstructure. (Lib. 3. cap. 3.) "For the foundation of these works the ground must be dug down to the solid earth, and in the solid so far as seems needful for the magnitude of the work. The superstructure must be made extremely strong. The walls above ground under columns are to be made thicker by half than the columns which rest upon them, so that the inferior may be stronger than the superior, and that the bases may not project beyond their support*.

These walls are called Stereobatæ because they sustain the whole weight. The thicknesses of the walls above must also be wrought in the same manner, and the interval either vaulted or made solid by piling, whichever may be best improved. But if the place is found to be infirm, soft, and marshy to the bottom, then it must be dug and emptied, and piles of alder, olive, or oak scorched driven in by machines very close together, and the intervals of the piles rammed with coal; after which the substructure is to be completed in the most compact manner."

"If the foundation happens to be on a hill the work will be more easily done. But if necessity obliges it to be erected on a plain or in a marshy place, the piling and superstructure must be executed in the manner described in the third book for the foundations of temples. And in another place, when treating on the stability of edifices and their foundations, he says (lib. 6. cap. 11.), If the edifices which are built level with the ground have their foundations constructed in the manner explained in the foregoing books that treat of walls and theatres, they will, without doubt, endure to a great age; but if vaults and arches are to be made, the foundations should be thicker than the walls of

* Vitruvius has before mentioned that the bases project a quarter of the diameter of the column beyond the shaft; so that the projection of the base, on both sides, added to the diameter of the column, is equal to one diameter and a half of the said column.

the superstructure, and the walls, piers, and columns should be disposed perpendicularly over the middle of those below them, that they may stand firmly; for if the walls or columns overhang, they cannot long remain firm.

In edifices which are built with piers and arches of wedges, with the joints tending to their centres, the extreme piers are to be made of a greater breadth, that they may resist the force when the wedges are pressed by the weight of the walls, and, impelling towards their centre, thrust against the abutment; for in that case, if the angular piers be of a greater breadth, they will, by confining the wedges, give firmness to the work; as great attention is to be given to this article, so likewise it is to be observed, that all walls stand perpendicularly, and in no part overhang. But the greatest care ought to be taken in the foundation, because it is often greatly damaged by the (internal) mass of earth, for this is not always of the weight it is in summer. In winter time, by imbibing the rain water, it will be greatly increased both in weight and size, and will rupture and extrude the enclosing walls. To prevent this effect therefore it must be thus ordered; first, the thickness of the wall is to be proportioned to the magnitude of the mass, and the anterides or erasmæ* are to be erected in the front so far apart as is equal to the height of the foundation; their thickness is to be the same as that of the foundation wall, and their projection at bottom is also to be equal to the thickness of the same wall; from thence diminishing gradually till at the top they may be as prominent as the thickness of the work†; moreover, adjoining to the inside of the wall toward the mass of ground, teeth formed like those of a saw are to be built, each tooth projecting so far from the wall as is equal to the height of the foundation wall. At the extreme angle an extent equal to the height of the foundation is marked off on both sides; from the interior angle and from those marks a diagonal wall is built, from the middle of which another wall is adjoined to the angle of wall. Thus the teeth and diagonal walls will not suffer the weight of the earth to press against the (foundation) wall, but will divide and restrain the pressure of the mass.

This dependance of Vitruvius upon discretion rather than prescribed rules, is a stroke of genius elicited by experience, and shows that it is often more difficult to teach by rule than to execute.

Andrea Palladio, however, boldly lays down a rule; he would have the escavation for the foundation a sixth part of the height of the whole fabric; and if there are to be cellars or other substructures they are to be proportionally lower. This architect either errs in his calculation, or English architects in practise; for we should esteem it a great loss of materials, to order in every instance a wall of thirty feet to have a foundation five feet in depth, which is considered more fully in the second part.

Palladio's directions are less general and

* Buttresses or counterforts.

† Both Perrault and Galliani have in this place deviated from the text, the latter without taking any notice of any such deviation.

They say that the anteride or erasmæ should at bottom project from the walls as much as the height of the wall, whereas the text clearly expresses; "quam assitudo constituta fuerit substructionis," as much as the thickness of the wall. Their reason for this seems to be that as Vitruvius adds, "deinde contrahentes gradatim ita uti summum habeant promicintiam quanta operis est crassitudo," from thence diminishing till at the top they are as prominent as the thickness of the work, and understanding by this that the projection of the erasmæ at the top is also to be equal to the thickness of the wall, and to increase gradually as they approach toward the bottom; they conclude that the text was erroneous in one or other of those passages; accordingly they have fixed on the former and altered it as abovementioned, although it is clearly and determinately expressed, leaving the latter passage (which is indeed vague and doubtful) unaltered; for this latter passage may be understood to signify that the anterides should project at the top of the foundation no more than is sufficient to receive the thickness of the work of the superstructure with its projecting pilasters, &c.

In this sense Barbaro has understood it; and that this is the true sense, the determinate manner in which the quantity of the projection at bottom and the diminution from thence upward is expressed, and in which all the copies agree, renders it highly probable.

Perrault remarks that as Vitruvius assigns the distance of the anterides to be equal to the height of the wall, the anterides will consequently be fewer as the wall is higher, which ought to be directly the contrary, and should be more numerous and closer in proportion as the wall is higher, as being in that case weaker and wanting more support; he, therefore, supposes we should read crassitudo instead of altitudo, and that the distances should be equal to the thickness of the wall; but this is taking it for granted that the wall, whether high or low, is to be always of the same thickness; whereas it is always understood that the walls are to be made thicker in proportion as they are higher; and as Vitruvius before says, in proportion to the mass of ground they enclose. Considering it in this light therefore, the height and thickness of the walls and the distance of the anterides will be the same in proportion to each other in all cases, and of course be proportionally firm and strong.

Vitruvius leaves it uncertain whether the thickness of the teeth and diagonal wall at the angles is excluded or included in the projection. He assigns them from the main wall, but Newton, in his translation of Vitruvius, determined for the former, as otherwise those diagonal walls would not bear against the anterides, which as being the strongest part of the wall they ought to do.

well adapted to the country in which he so much signalized himself.

Palladio, lib. 1. cap. 7. The foundation i. e. that part which is under the ground, and sustains the whole edifice, is properly called its basis. Of all the errors in building, those are the most fatal that are committed in the foundation, because they at once endanger the whole structure, nor can they be rectified but with the utmost difficulty. The architect must therefore take great care to make choice of a good foundation; since, in some parts it is naturally strong and solid, and in others, art must be used to make it so. A natural foundation is when the foundation is rocky, or consists of a soft sandy stone or gravel, which is a sort of earth inclining to be rocky; for without digging or any other assistance from art these foundations are strong of themselves, and capable of sustaining the most cumbrous structure either on land or water. But when a foundation is not natural, art must be exerted, and here the place for building on is either a solid earth or clay, a sandy, soft, and damp ground, or a marshy land. If the earth be solid and substantial, the foundation may be made of such a depth as to *an artful architect* may appear necessary to the bulk of the building and the strength of the soil; and if there are to be no cellars or other offices under ground it will be sufficient to dig a sixth part of the height of the building. The firmness and solidity of the earth may with ease be known by digging of wells, cisterns, or the like, and also by the herbs that grow upon it, if they are such as spring up only in a firm and solid soil. Another indication of the strength and solidity of the earth is when any thing ponderous is thrown upon it, it neither shakes nor resounds, which may be easily observed by the assistance of a drum; if, when it is set upon the ground and gently touched, it does not resound nor shake the water in a vessel that stands hard by it. The firmness and strength of the ground may likewise be known by the solidity of the earth in the places adjacent. But if it be a sandy or gravelly spot, particular care is to be taken whether it be on land or in the water; for if it be on the land the observation of what has been already mentioned concerning firm ground will be sufficient.

If we build in the water, the sand and gravel will be of no manner of service; for the water, by reason of its continual current and flood, is continually varying its bed, we must therefore dig till we find it a firm and solid bottom; or if this cannot with ease be effected, we must then dig a little into the sand and gravel, and drive in piles of oak till their ends reach the good ground, and on these we may build.

But if we are obliged to build on mossy or loose earth, we must then dig till we find solid ground, and that in proportion to the thickness of the walls and the bulk of the structure. This firm and solid earth, fit to support a building, is of various kinds; for, as Alberti justly observes, in some places it is so hard that iron can hardly penetrate it, and sometimes harder than iron itself. In some places it is a blackish, and in others of a whitish cast (which is deemed the weakest); in some it is like chalk, and in others soft and sandy. Of these various kinds that is the best which is cut with most toil and difficulty, or when it does not dissolve away in mud and dirt. An old foundation must never be built upon before we know its depth, and are well assured that it is able to sustain the fabric. But if the earth you build upon be very soft as in marshy grounds, you must strengthen it with piles, whose length must be the eighth part of the height of the walls, and their diameter the twelfth part of their length. These piles must be drove in so contiguous to one another that no others can be set between them, and particular care must be taken to ram them with gentle blows often repeated rather than with violence, for the earth will consolidate better the one way than the other. Piles must be drove not only under the walls but also under the inner partitions or walls. For if the foundations of the inner walls are weaker than those of the outer walls, when you come to lay the girders and joists you will find experimentally that the inward walls will sink while those on the outside stand firm, because they were raised on the piles, then all the walls will crack and destroy the whole structure; besides these crevices strike the eye very disagreeably. As, therefore, the expense of piles will be of less importance than the endangering the whole fabric; you must not be too saving, but distribute them according to the proportion of the walls, and take care that those within be placed somewhat thinner than those on the outside of the building. The foundation must be as thick again as the wall intended to be raised on it; and here you must take particular notice of the quality or goodness of the ground and the weight of the building, as also to make the foundation wider in soft and loose ground, and on which a very spacious fabric is to be erected. The plan of the

trench must be exactly level, that the weight may press equally in all parts, and not lean more on one side than the other, which occasions the cracking and dividing of the walls. The ancients, therefore, used to pave the plan with Tivertine, but we lay planks or beams when we build. The foundations must always slope, that is to say, diminish in proportion as they rise, yet so as that there may be as much left on one side as the other, and as the middle wall above may be directly perpendicular over the middle of that below, which must be also particularly regarded in the diminishing walls above ground, for this will make the fabric much stronger than if the diminution were made any other way. Sometimes to prevent large expense, and particularly in marshy grounds where we are forced to make use of piles; the foundations must be arched, and on this the edifice must be raised. In large buildings it may be very proper to make vents or holes through the body of the walls from the very foundation to the roof, in order to let out the winds and vapours, which are very prejudicial to the fabric; diminishes the expense, and will likewise be found very convenient in case winding stairs are to be made from the bottom to the top.

It is sound advice in Sir Henry Wotton's Elements of Architecture, to prescribe that wells should first be sunk, to which I would add that the architect or professed mineralogist, if in a large concern, should make a diagram of the substrata; and also a second should be sunk at a distance to observe the variations or dip of the strata, so that as little as possible be left to conjecture. We may gather from them some excellent maxims, amidst the quaintness of his style that may be termed aphorisms rather than by any other name.

Therefore, that we may found our habitation firmly, we must first examine the bed of earth (as I may term it) upon which we will build, and then the underfillings or substruction, as the ancients did call it; for the former we have a general precept in Vitruvius, twice precisely repeated by him as a point indeed of main consequence; First, lib. 1. cap. 5. and again more fitly, lib. 3. cap. 3. in these words Philander does well correct the vulgar copies, *Substructionis Fundationes fodiantur* (saith he) *liquent inveniri ad solidum et in solido.* By which words I conceive him to commend unto us not only a diligent but even a jealous examination, what the soil will bear, advising us not to rest upon any appearing solidity, unless the whole mould through which we cut have likewise been solid; but how deep we should go in this search he hath nowhere, to my remembrance, determined; as perhaps depending more upon discretion than regularity, according to the weight of the work; yet Andrea Palladio hath fairly adventured to reduce it into rule, allowing for that cavasione (under-digging or hollowing of the earth) a sixth part of the height of the whole fabric, unless the cellars be under ground, in which case he would have us (as it should seem) to sound somewhat lower.

Some Italians do prescribe that when they have chosen the floor or plot, and laid out the limits of the work, we should first of all dig wells and cisterns and other conveyances for the suillage of the house, whence may arise a double benefit, for both the nature of the mould or soil would thereby be safely searched; moreover, those open vents would serve to discharge such vapours as, having otherwise no issue, might peradventure shake the building. This is enough for the natural grounding, which though it be not a part of the solid fabric, yet here was the fittest place to handle it.

There followeth the substruction or groundwork of the whole edifice which must sustain the walls, and this is a kind of artificial foundation as the other was natural; about which these are the chief remembrances. First, that the bottom be precisely level, where the Italians, therefore commonly lay a platform of good boards, then that the lowest ledge or row be merely of stone, and the broader the better. Closely laid without mortar, which is a general custom for all parts of building that are contiguous to board or timber, because lime and wood are insociable, and if any where unfit confiners, then most especially in the foundation. Thirdly, that the breadth of the substruction be at least double to the insistent wall, and more or less as the weight of the fabric shall require; for, as I may again repeat, discretion may be freer than art. Lastly, I find in some a curious precept that the materials below be laid as they grew in the quarry, supposing them belike to have most strength in their natural and habitual posture. For as Philip de L' Orme observeth, the breaking or yielding of a stone in this part, but the breadth of a back of a knife will make a cliff of more than half a foot in the fabric aloft; so important are fundamental errors, among which notes I have said nothing of pallification on or applying to the ground plot, commanded by Vitruvius, when we build upon a moist or marshy soil, because that were an error in the first choice; and therefore

all seats that must use such provision below (as Venice for an eminent example) would perhaps on good inquiry be found to have been at first chosen by the counsel of necessity.

I shall conclude the present part with the opinion of Leo Battista Alberti, who is more diffuse on this interesting subject, omitting some part of his excellent observations on the choice of ground, &c. as well as on the practice of foundations of bridges.

In marking out your foundations you are to remember that the first groundwork of your wall and the socles which are called foundations too, must be a determinate proportion broader than the walls that are to be erected upon it, in imitation of those that walk over the snow in the alps of Tuscany, who wear upon their feet hurdles made of twigs and small ropes plaited together for that very purpose; the broadness of which keeps them from sinking in the snow. How to dispose angles is not easy to teach with words alone, because the method of drawing them is borrowed from the mathematics, and stands in need of the example of lines.

My method in describing the foundations is to draw some lines, which I call radical ones; from the middle of the fore front of the work I draw a line quite through to the back front, in the middle of this I fix a nail in the ground, from which I raise and let fall perpendicular according to the method of the geometers, and to these lines I reduce every thing I have occasion to measure, which succeeds perfectly well in all respects; for the parallel lines are obvious; you see exactly where to make your angles correspondent, and to dispose every part agreeably with the others. But if it so happens that any old buildings obstruct your sight from discovering and fixing upon the exact seat of every angle, your business then is to draw lines at equal distances in those places that are clear and free; then having marked the point of intersection by the assistance of the diameter and gnomon, and by drawing other lines at equal distances, fitted to the square, we may completely effect our purpose; and it will be of no small convenience to terminate the ray of sight with a line in those places which be higher than the rest; whence letting fall a perpendicular we may find the right direction and production of our lines.

The rest of this chapter concerns our present subject but little, but in the succeeding he gives the following excellent directions which, with the due allowance for difference in soil, may be with great safety followed.

You must, says he, use different methods for foundations according to the diversity of places, whereof some are lofty, some low, others between both, at the sides of hills; some again are parched and dry, as generally the summits of ridges and mountains, others damp and washy, as those that lie near seas or lakes, or in the bottoms between hills. Others are so situated as neither always dry nor always wet, which is the nature of easy ascents where the water does not lie and soak, but runs gently off. We must not trust too hastily to any ground though it does resist the pickaxe, for it may be in a plain and be infirm, the consequence of which will be the ruin of the whole work. He mentions a tower at Mestre, a place belonging to the Venetians, which in a few years after it was built made its way through the ground it stood upon; which, as the fact evinced, was a loose weak soil, and buried itself in earth up to the very battlements. For this reason they are very much to be blamed, who, not being provided by nature with a soil fit to support the weight, and lighting upon the ruins or remains of some old structure, do not take the pains to examine the goodness of its foundation, but inconsiderately raise great piles of building upon it, and out of the avarice of saving a little expense, throw away all the money they lay out on the work. It is therefore excellent advice, the first thing you do, to dig wells, for several reasons, and especially to get acquainted with the strata of the earth, whether sound enough to bear the superstructure or likely to give way. Add likewise that the water you find in them and the stuff you dig out will be of great service to you in several parts of your work; and moreover, that the opening such vents will be a great security to the firmness of the building, and prevent its being injured by subterraneous exhalations. Having, therefore, either by digging a well or any hole of that nature, made yourself thoroughly acquainted with the veins or layers of the earth, you are to make choice of that you may most safely trust with your superstructure. In eminences or wherever else the water, in running down, washes away the ground, the deeper you make your trench the better. In situations upon slopes, Columella directs us to begin our foundations at the lowest part of the slope first, which is certainly very right; for besides that, whatever you lay there will always stand firm and immoveable in its place; it

will also serve as a prop or buttress to whatever you add to the upper parts, if you afterwards think fit to enlarge your structure, you will also thereby discover and provide against those defects which sometimes happen in such trenches by the cracking or falling in of the earth. In marshy grounds you should make your trench very wide, and fortify both sides of it with stakes, hurdles, planks, sea weeds, and clay, so strongly that no water may get in; then you must draw off every drop of water that happens to be left within your frame work, and dig out the sand and clear away the mud from the bottom till you have firm dry ground to set your foot upon. The same you are to do in a sandy ground as far as necessity requires. Moreover the trench must be laid exactly level, not sloping on either side, that the materials laid upon it may be equally balanced. There are other things ordered to be done in marshy situations, but they belong rather to the wall than the foundations. They order us to drive into the ground a great number of stakes and piles burnt at the end, and set with their heads downwards, so as to have a surface of twice the breadth we intend for our wall, that these piles should never be less in length than an eighth part of the height of the wall to be built upon them, and for their thickness it should be the twelfth part of their length and no less. Lastly, that they should be drove in so close that there is not room for one more. The instrument we use for driving these piles, whatever sort it is of, should do its business by a great many strokes repeated; for when it is too heavy, coming down with an immense and intolerable force, it breaks and splits the timber; but the continual repetition of gentle strokes wearies and overcomes the greatest hardness and obstinacy of the earth. You have an instance of this when you go to drive a small nail into a hard piece of timber, if you use a great heavy hammer it would not do, but if you work with a manageable light one it penetrates immediately. Whatever has been said may suffice with relation to our trench, unless we would add, sometimes either to save money or avoid an intermediate piece of rotten ground, it may not be amiss to make a foundation not continued entire all the way, but with intervals left between, as if we were making only columns or pilasters; then turning arches from one pilaster to the other, to lay over them the rest of the wall. In these we are to observe the same directions as we gave before; but the greater weight you raise upon them, the larger and stronger pilasters and bases you must make.

For making the lower courses, that is to say, raising the foundations up to the level of the ground. I do not find any precepts among the ancients except this one, that all stones, after being in the air two years, discover any defect, must be banished for the foundations; for as in an army, the sluggish and weak, who cannot endure the sun and dust, are sent home with marks of infamy, so those soft enervated stones ought to be rejected and left to an inglorious repose in their primitive obscurity. Indeed, I find by historians that the ancients took as much care of the strength and soundness of their foundations in all its parts as of any other part of the wall. Asisthus the son of Nicerenus, King of Egypt (the author of the law, that whoever was sued for a debt should give the corpse of his father in pawn), when he built a pyramid of bricks to make his foundations, drove piles into the marsh and laid his bricks upon them. And we are informed that Ctesiphon, the excellent architect that built the famous temple of Diana at Ephesus, having made choice of a level piece of ground, thoroughly drained and likely to be free from earthquakes, that he might not lay the foundations of such a huge pile in such a loose and unfaithful soil without due precautions, first made a bottom of coals, pounded to dust, then drove in piles with fleeces and coals wedged in between pile and pile, and over these a course of stone with very large junctures. We find that about Jerusalem, in the foundations of their public works, they sometimes used stones thirty feet long, and not less than fifteen high. But I have observed that in other places the ancients, who were wonderfully expert in managing of great works, followed different rules and methods in filling up the foundations. In the sepulchre of the Antonini, they filled them up with little pieces of very hard stone each not bigger than a handful, and which they perfectly drowned in mortar. In the forum Argentarium with fragments of all sorts of broken stones; in the Comitia with bits of the very worst sort of soft stuff. But I am mightily pleased with those who in the Tarpeia imitated nature, in a contrivance particularly well adapted to hills; for she in the formation of mountains mixes the softest materials with the hardest stones. So these workmen first laid a course of squared stone as strong as they could get to the height of two feet; over these they made a kind of plaster of mortar and broken fragments,

then another course of stone, and with another of plaster they finished their foundation. I have known other instances where the ancients have made much the same sort of foundations and structures too of coarse pit gravel and common stone that they have picked up by chance, which hath lasted many ages. Upon pulling down a very high and strong tower at Bologna they discovered that the foundations were filled with nothing but round stone and chalk, to the height of nine feet, the other parts were built with mortar. We find, therefore, that very different methods have been used, and which to approve most, I confess myself, all of them have so long endured firm and sound; so that I think we ought to choose that which is least expensive, provided we do not throw in all manner of old rubbish and any thing apt to moulder. In laying foundations under rows of columns, there is no occasion to draw an even continued line of work all the way without interruption, but only first to strengthen the places you intend for the seat or beds of your columns, and then from one to the other draw arches with their back downwards, so that the plane or level of the area will be the chord of these arches. For standing thus they will be less able to force their way into the earth in any one place, the weight being counterpoised and thrown equally on both sides of the props of the arches. And how apt columns are to drive into the ground by means of the great pressure of the weight laid upon them is manifest from the noble temple of Vespasian that stands to the north-west. For being desirous of leaving the public way, which was interrupted by that angle, a free and open passage underneath, they broke the area of their platform, and turned an arch against the wall; leaving that corner as a sort of pilaster on the other side of the passage, and fortifying it as well as possible with strong work and with the assistance of a buttress. Yet this at last, by the vast weight of so great a building and the giving way of the earth became ruinous.

Having thus quoted the opinions of some architects, whose practical and theoretical knowledge have procured for them the just distinction of masters in the science, the next step will be by way of summary, to collect them to a focus, which I shall denominate the *ancient practice*. In the second, to narrate my own method in common cases, detailing some difficulties that have occurred, with the methods used to overcome them, and the event of their success. And in the third, a compendium of rules drawn from the above sources, which I shall call the *modern English practice* of forming foundations.

The Summary of Ancient Practice.

We observe in all the authorities before cited, without exception, a jealous solicitude towards a knowledge of the component matter of the substrata, more necessary for the volcanic territory of modern Italy, than the more solid and secure soil of Great Britain.

Sir H. Wotton, the only Englishman quoted (because he found it in Palladio and others), directs wells to be dug to obtain that knowledge, and has given it as a maxim never to be omitted. It is undoubtedly an excellent practice where wells are wanted beforehand; yet, I do not think it so indispensably necessary in this country, as to be performed solely for the purpose of investigating an intended foundation, for the most usual and common kind of houses.

Vitruvius, as before observed, very judiciously leaves much to the discretion of the architect, who, if worthy of the name, will be at no loss in accommodating his intentions to the occasion, and his means to the difficulty. This observation, from the reputed father of the profession, proves to my mind, as clear as history, that he was as much an executive as we are certain he was a theoretical architect. Reason would dictate, if Vitruvius did not, that foundation walls should be thicker than those above them; such general observations convey but little information; but he affords something more like certainty as to a minium, and from which we may draw an inference as to its general practice, when he says, the footings should be thicker by half than the superstructure. As for the depths he determines nothing more than to dig down to the solid earth. If the ground was weak, swampy, or marshy, he dug it all out and well piled it. In other respects his mode of practice did not sufficiently differ from ours to make it worth recapitulating.

Palladio defines the foundation to be that part which is under ground, and sustains the whole weight of the edifice; he is therefore justly solicitous that no error should be committed, or defect suffered to escape notice, in this important part of the building. He prefers a natural foundation, or one which, without assistance from art, will sustain the most cumbrous structure in either land or water. He does not essen-

tially differ from Vitruvius (whom he much studied) except in determining the depth of a foundation to be at least one eighth the height of the wall, and even more when cellars are used; which may then be made of such additional depth as (his translator renders it) to an artful architect may appear necessary. I think if a modern architect was to make such a preposterous footing to a house, a jury of twelve honest men, in spite of that great author's authority, would pronounce him to be really a very *artful* architect; and one who paid a due regard to the quantum of per centage on his labours, as well as the stability of his edifice. An architect of our own times, in a nutshell full* of excellent observations, says, that a little stronger than strong enough is a good maxim in building: admitted—but as the two extremes of the mean point of strong enough are errors, that architect is surely to be preferred who, by judicious calculations and attentive study (which should always be recommended to the architectural student), arrives at that desired point; rather than by an overcareful desire of being a little stronger than strong enough, commits a waste of his employer's money, by employing timbers or erecting walls of double or treble the required dimensions. These memoranda are not intended for the medium of that school of architecture, which the abovementioned author pleasantly calls the St. George's Fields and Mary-le-bone School of Temple Builders, to whom, as he observes, it would be flat heresy. We need not fear their encroachments on this extreme.

Of building in water Palladio says but little; neither have I been very solicitous to search for the methods used by the old masters on that head; thinking it of sufficient importance for a separate treatise. From his directions for piling a foundation, I take leave to differ in part. He says the length of the pile must be an eighth part of the height of the intended wall to be erected on it; I cannot allow this to be an invariable maximum. So long as it is driven to the solid, whether it is a fourth or a fourteenth part of the proportion given by Palladio; I conceive it to be the most proper length. He orders the piles to be driven so contiguous to one another, that no others can be set between them; but this is certainly a needless waste; as a due lateral or transverse compression of the soil is better obtained by moderate intervals, than such close ones as to exude the earth†. Their diameter was a twelfth part of their length; by which rule a pile twelve feet long must be a foot square. In my opinion a much smaller diameter would be preferable; as every builder knows what an immense weight a perpendicular post or column will sustain, when prevented from leaving its perpendicularity. He preferred repeated gentle blows to violent ones, for driving them, and with reason; he also drove them under the inner or cross walls, which ought never to be omitted when they are to be carried up to the same height, or have heavy partitions or floors to sustain. This architect (Palladio) made his foundation wall twice the thickness of the superincumbent one (which is a better proportion than that of Vitruvius), and diminished upwards: the ancients, he observes, paved the trench with stone, but in his time they used plank. He also recommends some foundations to be arched, but leaves us in the dark as to the manner.

It would be but repetition to analyse Sir H. Wotton's directions, which are evidently more derived from former authors than from his own practice; and Alberti's is so similar, except in being more diffuse and mathematical, that I think I may here conclude the summary of ancient practice.

The Author's Method of Practice.

In detailing what I have presumed to call my own method, I trust that instead of being accused of egotism in the too frequent repetition of the personal pronoun *I*, the wish of conveying my information on the subject will counterbalance the defect.

In that description of the houses, which comes more frequently under our direction than royal palaces and splendid mansions, I think the best manner is, to sink the basement story to the intended level; digging the plan of it in every break, as little larger as possible, rather than a large square, that would extend beyond every part of it; because new made earth thrusting against new built walls is to be avoided when possible; and by this means the

* ΟΙΚΙΔΙΑ or nutshells, by Jose Mac Pake, an anagram upon the name of James Peacock, formerly joint architect with Mr. Dance to the corporation of London.

† In Piranesi and other delineators of the antiquities of Rome, the piling is often represented, so thickly planted, that the soil must have been entirely excavated to admit so many, and thickly driven piles. See particularly the foundation of the theatre of Marcellus in the abovementioned engraver's works.

earth supports itself all round, till the walls are sufficiently dry. Dig the footings upon an average two feet six inches below the above level, and cut under the perpendicular of the square of the basement story, for the spreading of the footings, for the same reason as beforementioned. If piles are necessary, I should order them to be driven upon the before quoted principle of Palladio, with the exceptions I there made. I wish here to take occasion to observe, that I give the preference most decidedly to the engine pulled by ropes and men, to any of the machine pile-drivers yet invented, as the furious heavy blows given by the latter are by no means equal to the continuity and regularity of the former. Sleepers two and a quarter times longer than the width of the superincumbent wall should then be laid across the trench, at intervals not more than two feet asunder, to be filled up with brick work level to the top; but no mortar suffered to touch the timber; sound oak or fir plank should then be laid upon them, well intersected and fastened together at the angles. If fir plank is used, and there is any appearance of sap or looseness of texture on the outside, it should be carefully sawed off.

The foundation wall is now to be erected thereon; the method I usually adopt and recommend is to have the bottom course, if for an external wall, twice the width; and if for an internal or partition wall, one and a half times the width of the superincumbent wall, but invariably to be of equal depths, for if it should be less in depth (a foot for example), there will be four joints or nearly three inches in common work less to compress or settle than the external walls. Two courses of the above dimension are then to be carried up perpendicularly, and then two more courses perpendicularly one inch and a half on each side less than the lower, and so on *gradatim*, by offsetts of one inch and a half on each side, every two courses, till it arrives at the intended thickness of the wall. The footings must be spread round every break, chimney, breast, or projection. When the soil is a fine hard gravel or gravel and clay of an equal consistency all round, the piles, sleepers, and planking may be entirely omitted. I have tried it on a fine gravelly foundation, on which a very heavy building, the upper part of the walls being in many places four bricks thick, has been erected more than ten years; and it has neither crack nor settlement.

Some Difficulties detailed.

In pulling down and rebuilding a house of very large dimensions, in the city, the front of the new house was to be set so far back from the street, that the new foundation stood about one foot three inches on the old foundation, and two feet three inches on the earth in the inside. Precautions were necessary to make the new foundation as hard as the original one; it was, therefore, very carefully piled, with intervals of about nine inches, every pile driven by an engine pulled by ropes and men as far as it could be, and then sawed off level; each pile was shod with iron rather more obtusely than is generally practised; for it is my opinion, that to keep the piles from splitting, and to break or remove any partial obstruction, is all that is wanting in this operation of shoeing the piles with iron, which is much better effected by these, than with such very lancet pointed piles as are often used. The foundations were prepared, and the footings laid in the manner I have just now directed. The front, both of the basement and ground stories, was to consist of very large openings, and small stone piers; the walls upon the footings were carried up to the level of the bottom of the basement windows, with inverted arches of semicircles under every opening; the diameter of which were eighteen inches longer than the width of the intended windows over them. When all the work was levelled, the stone piers were set upon the junctions of every arch, and carried up to the height of the ground-floor arches, and the basement arches inserted upon them afterwards. The front was upon that carried up of brick three very lofty stories; yet, with all these precautions, the front has receded from top to bottom, nearly three inches. The fact has been accurately ascertained, on the account of an accusation being hinted that sufficient care had not been taken with the foundation; but it was decided in its favour. Another case worth mentioning is, that in preparing the foundation of an intended warehouse for the heaviest description of goods, two large and deep cesspools of old privies were found under the bottom planking of the old foundation: they were too large to admit of arches being turned completely over them, as the upper surface of the arch, if constructed properly, would have risen too high for the windows of the basement story, and it was deemed imprudent to trust to planking laid across as before, the

old building having been only dwellings. Four piles wide across the foundation were therefore well driven at the extremities of each hole, the extreme width of the trench; and squares of piles, about three wide and four across, were driven as piers, leaving openings four feet wide; they were then sawed off level, capped with a large stone, a pier brought upon each, and flat arches, turned from one to the other, the whole length of the foundation. This has completely answered the purpose; for the superstructure is perfectly free from any appearance of partial settlement, though it has been heavily loaded three or four years. This method would be a more economical way of piling a foundation, where it is necessary, than the common way of driving them thick set, as nearly five-sixths of the piles and labour of driving might be saved; and when the spandrels between the arches were levelled up to their crowns, it might be sleepered and planked if wished, in the manner of a good foundation, or the insistent walls erected on them without. I shall certainly again adopt it on the next occasion that such a case comes under my direction.

Of Chimney Breasts, Bows, and other Projections.

In preparing the foundations for the footings of chimney breasts, semicircular or multangular bows, or other projections, inwards or outwards, from the face of the wall; it is much the best way to prepare them, so that the foundation from the wall to the point or line farthest from the face should be progressively raised from the wall outwards, in proportion to the height it is to be carried, or the solidity of the work; that in settling it may approach nearer to a level, or if it does not it appears sounder to the eye as well as being so in fact, to have it rather mounting upwards than dipping downwards and separating from the wall as it infallibly would without such precaution.

Compendium of Rules, or the modern English Practice--the Results of the foregoing Observations.

The trench is distinguished from the brick work or masonry, by calling one the foundation, and the other the footings and insistent walls.

Observation 1.—The foundation must be truly level, transversely and longitudinally.

2.—The interior or partition walls must be as low as the exterior or main walls, which are also to be of one uniform level.

3.—Inverted arches should be turned under all openings in buildings of any considerable size.

4.—The foundation must be well prepared by ramming, piling, planking, or otherwise, according to the necessity of the case.

5.—Foundations and footings of chimney breasts, bows, projections, &c. should be made to rise progressively from the face of the wall outwards.

6.—The footings to external and internal main walls, or such as are to be carried up more than two entire stories, are to be twice as thick as the insistent wall and partition walls, or such as are to be of only one story, one and a half times the said thickness.

7.—New made earth should not be laid against new built walls.

FOUNDER. (from *fundare*, Lat.] *In the history of architecture.* One who raises an edifice; one from whom any thing has its original or beginning. Many cities of antiquity vaunt of being founded by the gods. Minerva, Neptune, Apollo, and Hercules are the divinities to whom are attributed the founding of the greatest number of cities. Other cities are contented to owe their original to some hero or other great person, to whom they in general established a sort of worship. The names of the founders of celebrated cities are often to be found on ancient coins and medals. The colonies and provinces did not always acknowledge their actual originators, but those who founded the metropolis. It was thus that Calatia in Mœsia, and Priene in Ionia, named Hercules upon their medals as their founder, because Calatia was built by the Heraclidæ of Ionia, and Priene by Philotas of Bœotia, where Hercules was their tutelary god. Many cities of antiquity assume to themselves more than one founder, as Cyzicus attributes the founding of their city both to Hercules and the hero by whose name it was called, and Aristides, in his eulogium upon Cyzicus, names Apollo as one of its founders. When a city was destroyed, its rebuilder always received honour, as a joint founder, with him to whom it owed its origin. In this manner Smyrna acknowledged three founders, Pelops, Theseus, and Alexander the Great; and when Hadrian made Athens the object of his munificence, the Athenians acknowledged him as equally a founder with Theseus, naming part of the city Hadrianopolis after him, as inscribed upon

the arch of Hadrian; on approaching the south front of which the inscription declares Ἀιδεις Ἀδριανου κ' ουχι Φησεως πολις. "What you see is the city of Hadrian, and not that of Theseus." On the other front is inscribed Ἀιδεις Ἀθηναι Θησεως ἡ πριν πολις. "What you see is Athens, the ancient city of Theseus." So also does Silius Italicus give to Marcellus the title of founder of Syracuse, because he prevented his army from pillaging and destroying it; and Procopius to Justinian that of founder of the empire, because of the number of public buildings which he ordered to be erected in the various countries belonging to it.

The Greeks designated the founders of cities on their medals by three different names, Ἀρχηγεταις *Archegetas*, prince; Οἰκιστας *Oikistas*, first builder; and more frequently Κτιστης *Ktistes*, creator or founder. The Romans most generally used upon their medals the word *conditor*, but upon a scarce medal of Corinth the word *fundator* is inscribed, and *dedux* upon one whose name is effaced, but published by Pelerin.

Spanheim and Eckhel have given a list of the founders of cities, whose names are recorded as such upon medals. Among the principal are AUGUSTUS upon medals of Clazomenes, of Ephesus, of Teos in Ionia, and of Nicopolis in Epirus; BYZAS upon those of Byzantium; CYZICUS upon those of Cyzicus; HADRIAN upon some of Argos and Œlia Capitolina; HERCULES upon those of Calatia, of Cyzicus, of Nicæa in Bythnia, of Perinthus in Thrace, of Priene in Ionia, and many others; MERCURY upon those of Amasea; MNESTHEUS upon those of Elea in Æolia; PERGAMOS upon those of Pergamos in Mysia; TARAS upon those of Tarentum, &c. &c.

FOUNTAIN. [*fontaine*, Fr. from *fons*, Lat.] *In architecture and sculpture.* A carved basin through which a jet or spout of water is conducted; a building erected for the same purpose, or for public supply of water. In Greece every principal town had public fountains or conduits, some of which were of handsome designs and beautiful execution. In the city of Megara in Achaia there was a public fountain established by Theagenes, which was celebrated for its grandeur and magnificence. The *Pirene*, a fountain at Corinth, was encircled by an enclosure of white marble, which was sculptured into various grottos from which the water ran into a splendid basin of the same material. Another fountain in Corinth, which was called *Lerna*, was encircled by a beautiful portico, under which were seats for the public to sit under during the extreme heats of summer to enjoy the cool air that emanated from the falling waters. In the sacred wood of Esculapius at Epidaurus there was a fountain that Pausanias cites as most remarkable for the beauty of its decorations. At Messina there were also two elegant fountains, one called Arsinoë, and the other Clepsydra. Pausanias also alludes to several other fountains, in various parts of Greece, celebrated for the grandeur and beauty of their architectural and sculptural decorations.

The French are more celebrated for their fountains than we are, but Italy, more particularly Rome, is still more so. The fountains of Paris, of the Thuilleries, of the orangery at Versailles, at St. Cloud, and other places in the neighbourhood, have splendid fountains replete with conceits and bad taste in their decorations.

The principal and most admired fountains of Rome are those of the Villa Aldobrandini at Frescati, of the Terminus, of the Mount Janiculum, of the gardens of the Belvedere in the Vatican, of the Villa Borghese, which has also in the audience chamber a splendid fountain of silver, five Roman palms in height, ornamented with superb vases and flowers; of Trevi, of Termini, the three fountains of St. Paul, of the Aqua Cetosa, and many others described in the numerous works on that ancient city. Sir Henry Wotton describes, in his Elements of Architecture, a fountain by Michel Angiolo, in the figure of a sturdy woman wringing a bundle of clothes, from whence the water issues that supplies the basin.

FRANCISCA. [*Lat.*] *In the archaiology of painting and sculpture.* The axe that, encircled by a bundle of fasces, was carried before the consuls and other magistrates of Rome. Also the ancient battleaxe used by the Franks. See FASCES.

FRESCO. [Italian.] *In painting.* A method of painting on stucco or other hard plaster while the substance is soft or *fresh*, whence it derived its name. Of all the modes employed in painting that in fresco is the most ancient, the most durable, the most expeditiously performed, requires the greatest skill in its execution, and is the most worthy of being employed in the embellishment of splendid edifices; which are reasons why no other style should be adopted in great and public works.

Of the antiquity of *fresco painting* there can be no doubt. Its simplicity, and the ignorance of the ancients of oil, varnishes, &c. are sufficient vouchers. The Egyp-

tians practised it from an unknown antiquity, as the chests or cases of their mummies, and the paintings in their tombs abundantly prove; as they do also their surprising durability. The great series of pictures in the Poïkile, a grand gallery, portico, and place of exercise at Athens, of which Pausanias speaks, appear to have been painted in this manner; as well as those which surrounded the statue of Jupiter Olympius at Elis.

In executing paintings in fresco the necessary preparations are the *sketch*, the *cartoon*, in full size, cut in suitable pieces, the *colours*, prepared only with water, and the two sorts of *plaster*, the rendering and finishing coats, on which the picture is to be painted. The painter's mind must be full of his subject, every thing must be predetermined upon, as no alteration or amendment can take place; he must have a rapid and decisive execution, and be well acquainted with the qualities of his colours, as they dry lighter than when laid on. There are two operators, the plasterer in constant attendance, and the painter, who follows him, and dyes or embues his colours into the very body of the plaster, while it yet be wet.

Every thing being in readiness the plasterer renders the wall with a coat of coarse stucco formed of lime and sand, and finishes with the finer to such a surface as the artist requires; who then pricks his outline through the cartoon, and draws it with a style, to prevent the colours running beyond them. The outlines of Michel Angiolo's Last Judgment are cut in with a depth, boldness, and decision quite surprising, that make the figures almost in low relief. The colours must then be dashed on at once in a broad, bold, and general manner that, in an able artist, must produce a grand style. But farewell to touch, to pentimenti, glazing, handling, macgilp, first, second, and third paintings, varnishing, and the trickeries of the oil palette; but *tanto meglio*, as Milizia says, for fine forms well expressed, character well portrayed, living attitudes, brilliant colouring, and vigorous execution, will command the admiration of the true critic. Well might Michel Angiolo say, after dashing in his gigantic prophets and grand figures of the Capella Sistina, that "le pitture ad olio sono per le dame e per i zerbenotti che si piccano d'eleganza di mano."

The frescoes of Raffaelle are finer coloured, bolder drawn, and more vigorously executed than his easel pictures. Michel Angiolo is never known to any certainty to have touched oil; and the frescoes of Annibale Caracci in the Palazzo Farnese are the finest of his works.

Dom. Pernetti, in the preface to his *Dictionnaire portatif de Peinture*, has given a detailed account of the manner of painting in fresco. Vasari also may be consulted upon this subject in his *Introduzione alle tre Arti del Disegno*, which is printed with his Lives of the Painters; as well as Bernard du Puy de Grez, in his *Traité sur la Peinture*, Toul. 1699, 4to.; the eighth and ninth chapters of *Elemens de Peinture*, par De Piles. See Painting.

Frieze, Frize, or Frise. [*frise*, Fr. from *freggio*, Ital. *phrygia*, Lat. φρυγίον, Gr. an embroidered belt or band.] *In architecture.* The middle compartment or division of an entablature. It was called Ζωοφόρος by the Greeks, and by Vitruvius after them, from being often sculptured with figures of animals and plants. The frieze is the best situation in an entablature for sculptures and inscriptions; and many of the finest of the ancient temples have had their friezes superbly decorated. See Entablature. The splendid metopes of the Elgin marbles were ornaments of the frieze of the Parthenon, and the Phigaleian marbles of the temple of Apollo Epicureios at Phigaleia. The frieze of the temple of Jupiter Olympius at Elis bore sculptural representations of the chariot race of Pelops and Oenomaüs. Bucklers of gold, which were part of the spoil after the battle of Marathon, were suspended according to Pausanias, in the frieze of the temple of Apollo at Delphos, which gave rise to sculptural imitations of them in many metopes of the Doric frieze.

Gerard Audran has published a book of friezes after La Fage. Jombert also has a few in his works of Della Bella; and Columbani and Le Pautre have also published several. Stuart's Antiquities of Athens has many from the Parthenon, the temple of Theseus, and other Grecian buildings; and the trustees of the British Museum have published those of the temple of Apollo at Phigaleia from the original marbles in their possession. See Architecture.

Frigidarium. [Lat.] *In ancient architecture.* According to Vitruvius, the cold bathing apartment, and sometimes the cold bath itself. See Bath.

Fringe. [*frange*, Fr.] *In costume.* Ornamental appendages of gold, silver, and other materials, added to dress or furniture. Winckelmann, in his *Histoire de l'Art* (book iv. chap. v), asserts that the dress of the Grecian women were never ornamented with fringe. The celebrated

figure of Thalia that was found among the paintings of Herculaneum, and presented by the King of Naples to Buonaparte, when first consul of the French Republic, has fringe upon the upper part of the drapery. The Romans designated this portion of costume by the words *fimbria* and *lacinia;* the Greeks by those of θύσανοι and κρόσσοι, which must not be confounded with the decorated hem that they called κράσπεδον. The Romans derived the use of fringes upon their garments from the Persians and other oriental nations, and it was reckoned effeminate, says Suetonius in his Life of Julius Cæsar (lib. 45), in that illustrious soldier to wear a tunic with long sleeves ornamented with fringes. Homer describes the fringe that decorated the ægis of Minerva as composed of a hundred tufts of gold, each of which was valued at a hundred oxen.

FRONTISPIECE. [*frontispicium*, Lat.] *In architecture and engraving.* That part of a building which directly meets the eye. An engraving prefixed to a book, generally illustrative of the author or of the whole work.

FRUIT. [Fr.] *In painting and sculpture.* Representations of the product of trees and plants which contain the seed. Many of the observations in the article FLOWER PAINTING (see that article) apply themselves to fruit; being also an imitative and laborious art, demanding equally high finish and care. The same study of nature, colours, &c. are required as in the flower painter, with rather a richer and fuller pencil. Among the artists who have distinguished themselves the most as painters of fruit are Jean Louis Bos, who flourished about 1490; Cés. Bernazzono, about 1556; Jacques Van Es, about 1620; Pierre Paul Gobbo, in 1630; Jean Roos, died in 1638; Jean De Heck, in 1660; Dan. Segers, died in 1660; Jean de Kessel, in 1665; Jean Philippe de Thielen, in 1667; Juan de Avellano, in 1670; Donna Bettina, in 1670; Marius Nuzzi, surnamed De Fiori, died in 1673; J. J. De Heem, died in 1674; Corn. de Kik, in 1675; Guill. d'Aelst and Mignon, died in 1679; Fel. Bigi, Marg. Caffa, and Angel Ascione, in 1680; Gaspard Smitz, died in 1689; Abr. Breughel, died in 1690; Nic. Verendael and Morel, in 1690; Pierre Withoos, in 1693; Marie d'Oosterwick, in 1693; Jean Bapt. Monnoyer, died in 1699; Ernest Stuvens, in 1700; Herm. Verelst, died in 1700; Joris Van Son, died in 1702; Math. Withoos, died in 1703; Crepu, in 1705: Zon, in 1710; Simon Verelst, died in 1710; Gillemanns, died in 1713; Jean Bapt. Blain de Fontenay, died in 1715; Madelaine Fürst, in 1717; Jean Moortel, died in 1719; Verbruggen, died in 1720; Van Royen, died in 1723; Francois Tamm, surnamed Dapper, died in 1724; Scipion Angelini, died in 1729; Giov. Garri, died in 1731; André Belvedere, died in 1732; Gaspard Lopes dai Fiori, died in 1732; Pierre Hardime, died in 1748; Corn. Rœpel, died in 1748; Jean Van Huysum, died in 1749; Rachel Ruysch, in 1750; Henri Christophe Piccart, died in 1769; Jacques Xavery, in 1769, &c. &c. See FLOWERS. Fruit painting, as a distinct art, is not much practised in England except by those ladies mentioned as flower painters, except in botanical illustrations which are in general executed by artists practising other departments of imitative arts.

FRUSTUM. [Lat.] *In architecture and archaiology.* A piece cut off from a regular figure, as the *shaft* of a column is a frustum of a cone. It is also used for a broken statue, a fragment of a gem, or an antique coin or medal.

FULMEN. [Lat.] *In the archaiology of painting and sculpture.* The weapon which Uranus presented to Jupiter for having delivered him from the captivity in which Saturn held him; and which, according to Virgil, was forged by the Cyclops. The fulmen or thunderbolt in the hand of Jupiter Fulminans was a sort of hieroglyphic, and had three different meanings, according to the three ways in which it was represented. The first manner is a sort of wreath of flames in a conical shape, like what is commonly called a thunderbolt or stone. This was adapted to Jupiter when mild and calm, and was held down in his hand. The second is a similar figure, with two transverse darts of lightning, and sometimes with wings, to denote swiftness. This was given to him when in the attitude of punishing. The third way is a handful of radiating flames, which Jupiter held up, when in the act of inflicting some exemplary punishment. The *fulmen*, of whatever shape it was, consisted chiefly of fire, and is often so called by the poets. The expressions in Horace (l. i. od. 2, v. 4), Ovid (Met. ii. v. 249. 345), and Virgil (Geor. i. v. 329), of ceruscus, rubens, and *rutilus* refer to that gleam of light cast by lightning on the objects near it, and are very picturesque. The Jupiter *Tonans* is represented on antique medals and gems, as holding up the triple-forked *fulmen*, and standing in a quadrigæ thundering with his rapid coursers, throwing the fulmen out of his hand, which darts at the same time out of the clouds beneath him. On

a gem in the Florentine gallery Jupiter is represented driving his chariot against one of the giants, and grasping the fulmen as ready to dart it at his head.

The *fulmen* is also given to the eagle of Jupiter, who grasps it in his claws, and uses it in a similar manner to the thunderer himself. Minerva is also so armed on a medal of Syracuse, and according to Virgil, she used it against Ajax the son of Oïleus, for having ravished Cassandra in her temple on his return homeward from Troy. Hercules has also the fulmen upon medals of the Brutiani, who boasted of that god as their founder. Alexander the Great was also so painted by Apelles, as the son of Jupiter Ammon. Several other of the heathen gods have been represented on ancient medals with the *fulmen*, as Apollo on some of Nicopolis, Mars on those of the Brutiani, Vulcan on those of Cyzicus, of Thyatira, &c. Pan, Cybele, Victory, and other minor and moral deities have also been so represented; but the fulmen alone is generally received as an attribute of Jupiter, who is emphatically termed by ancient poets the *Thunderer*.

One of the Roman legions bore the distinctive name of *fulminans*, and bore the winged *fulmen* on their bucklers, which spread all over the shield, as appears by columns of Trajan and Antoninus, and as described by Flaccus, Argon. VI. v. 56. This fulmen agrees with the epithets *trifidum* and *trisulcum* in Ovid (Met. II. v. 325, 847).

There is a figure of Jupiter in Buonarotti's collection at Florence, holding up the three-forked bolt as just ready to dart at some guilty wretch; but with the conical body of the fulmen lying under his feet, as of no use in cases of severity.

FUR. [*fourrure*, Fr.] *In costume.* Skin of beasts with soft hair, with which garments are lined for warmth. The custom of using furs in garments is of the highest antiquity. Strabo expressly says, that the Amazons had garments of skins, and they are so represented on many ancient monuments. Hercules, Bacchus, Cybele, and other heathen deities, are also represented as clothed with the skins and fur of the lion, leopard, panther, and other wild animals.

FUST. [*fustus*, Lat.] *In architecture.* The shaft of a column, so named from being originally one single trunk or limb of a tree, like a post or large cudgel. The word *fust* generally applies where the shaft is of a single stone or *solides*, and distinguished from the *structiles*, or such columns whose shafts were constructed of many pieces.

G.

GABLE. [*gavel*, Welsh.] *In architecture.* The pedimental end of a building formed by walling up the end of the roof. In the ancient domestic architecture the gable was a very ornamented part of the house, being finished in steps, embrasures, mouldings, sometimes with a niche, and at others with an elegant window or aperture to give air to the roof. In classical architecture it is called pediment. See PEDIMENT.

GAIETA or GAETA. [from Καιω I burn, because when the Trojan women arrived here, fearing their husbands would leave them, they burnt their ships.] *In the history of the arts.* The *Cajeta* of the ancients, a seaport town of Italy, in the kingdom of Naples, and province of Lavora. The sea floats into its moats, which are both broad and deep. Its harbour, which is well described by Homer, still exhibits the same character. It was anciently repaired by Antoninus Pius. The streets of the town are neatly built and well paved; the houses are built on porticoes; and the general appearance of the town is lively within and picturesque without. "The cathedral," says Mr. Eustace "though not large nor highly decorated, is well proportioned, well lighted, and, by the elevation of the choir, admirably calculated for public worship. The font is a fine antique vase of white marble, with basso rilievi representing Athamas, Ino with a child in her arms, and a group of Bacchantes. The sculptor was an Athenian; but such a vase is better calculated for the gallery of antiques than for the place where it now stands. Opposite the great portal of the cathedral rises an antique column, marked with the names of the winds in Greek and Latin. The tomb of Munatius Planeus stands upon a bold eminence, on the neck of land which joins the peninsula to the continent. Like that of Hadrian, it is round, stripped of its marble casing, and converted into a tower with battlements. The gulf abounds with fish, particularly sturgeon, from which caviar is made. Gaeta is the see of a bishop, suffragan of Capua. Distance from Naples forty miles north west; from Mola four miles by land, and two by water. See HOMER, odyss. x. 107; and EUSTACE's Travels, vol. i. p. 175.

GALLERY. [*galerie*, Fr.] *In architecture and painting.* An apartment of considerable length in comparison with its width; sometimes used for a connecting passage with which various rooms communicate, and in others for a spacious room, also of of great comparative length, set apart for the reception of pictures and statues. In modern palaces and extensive mansions and residences, the gallery has taken the place of the ancient portico, for the reception of pictures and sculptures. The gallery is an essential part of a magnificent residence, and is appropriate to a museum of natural and artificial curiosities. A gallery is sometimes decorated with the pencil of a single painter on its walls and cielings, with subjects of an historical or allegorical nature, like that of the Luxemberg at Paris, and others of a similar description.

Among celebrated galleries of antiquity that of Verres, described by Cicero, is the principal. It contained, among other beautiful works of art, a statue of Jupiter Οὔριος, the disperser of favourable winds, the Diana Segestes, a grand and beautiful statue of bronze, veiled, bearing a quiver on her shoulder, holding a bow in her right hand, and a lighted torch in the left. Apollo and Hercules, the works of Myron, a Cupid by the hand of Praxiteles, a Sappho in bronze by Silanion, and the famous flute player Aspendus. It also contained a splendid collection of vases, pateræ, &c. of gold and silver, decorated with costly gems and engraved stones. The pictures were of equal value and rarity, the tapestries embellished with rich borders of gold, and every part of the gallery enriched with all the splendour that art and wealth could bestow.

The gallery of the Palazzo Farnese at Rome is justly regarded as the masterpiece of the Caracci. The grand gallery of Fontainbleau, painted from the designs of Primaticcio by Nicolo da Modena, commonly called Messer Nicolo, represents the travels and labours of Ulysses on his return from the siege of Troy. France has many galleries of a similar kind, but of inferior execution; but the famous gallery of the Luxemburg, where Rubens exercised his gorgeous pencil with illustrative allegories of the life of Mary de Medici, is too well known to every artist and amateur to need description here. This gallery also contains the collection of pictures by Le Sueur, representing the history of Saint Bruno, that was painted for the Chartreuse, and many other works of art.

The principal galleries of England are those of the Marquis of Stafford at Cleveland House, St. James's; the National (late the Angerstein) Gallery, now in formation; the Royal Galleries of Windsor Castle; Hampton Court, celebrated for its inestimable treasure, the Cartoons of Raffaelle; Lord Egremont's at Petworth, Sussex; the late Fonthill Gallery; the Titian Gallery at Blenheim; Lord Grosvenor's fine collection, so resplendent in its Rubens's; Sir John Leicester's English gallery, and many others of minor consideration.

The most celebrated galleries of Germany are those of Vienna, of Dresden, of Dusseldorf, and at Sans Souci.

The principal works that have been published on the various celebrated galleries are, upon that of Florence, *Saggio istorico della real Galeria di Firenze*, di GIUSEPPE BENCIVENNI, Florence, 1778, 2 vols. in 8vo. According to this work the Florentine gallery contains one thousand one hundred and ninety-four portraits, and one thousand one hundred pictures of other descriptions. *La real Galeria di Firenza, accrescinta e riordinata di S. A. R. l'Archiduca di Toscana*, Flor. 1782, in 8vo. *La Galerie de Florence*, par WICAR, in fol. *Pitture del Salone imper, del Palazzo di Firenze*, Flor. 1751, in fol. *Azione gloriose degli Uomini illustri Fior. espresse co'loro ritratti, nelle volte della real Galeria di Firenza*, Florence, in fol. *Museo Fiorentino, che contiene i ritratti de' Pittori*, Flor. 1752, in fol. *Disegni della Galleria di Firenze di diversi Maestri, intagl.* di ANDREA SCACCIATI, stampati all acquarella, Florence, 1766, in fol. *Une Collection de soixante douze Portraits*, in fol. engraved after the principal pictures in the gallery, and published by order of Emperor Leopold II. *Galleria Mediciu*, Flor. 1788, in fol.

Upon the galleries of France are *Description des Tableaux du Palais Royal*, Paris, 1727, in 8vo. par DU BOIS DE SAINT GELAIS. *Catalogue raisonné des Tableaux du Roi, avec un Abrégé de la Vie des Peintres, contenant l'Ecole Florentine, Romaine, Vénétienne et de Lombardie*, par M. LEPICIE, Paris, 1752, 4to. 2 vols. *Catalogue du Luxembourg*, Paris, 1751, in 12mo. *Première Partie des Tableaux du Cabinet du Roi*, Paris, 1677, in fol. *Annales du Musée et de l'Ecole moderne des Beaux Arts*, par LANDON, in 8vo. *Cours de Peinture et de Sculpture, tiré du Musée Napoléon*, par FILHOL, in 8vo. *Le Musée Français*, par ROBILLARD, in fol. *L'Explication des Tableaux venus d'Italie*, par LE BRUN, 1796, in 8vo. *Galerie du Palais Royal, gravée d'après les Tableaux des différentes Ecoles qui la composent, avec*

un Abrégé de la Vie des Peintres, et une Description historique de chaque Tableau, par l'ABBE FONTENAY, Paris, 1784.

Upon the galleries of the Kings of Spain are *An accurate and descriptive Catalogue of the Paintings in the King of Spain's Palace at Madrid, with some Account of the Pictures in Buen Retiro*, by RICHARD CUMBERLAND, London, 1786, in 12mo. *Description de las Ecclesias Pinturas del R. Monasterio de S. Lorenzo del Escurial*, par FR. DE LOS SANTOS, in fol. Madrid, 1667. And concerning the collection of pictures of the Kings of Sweden, which are in the grand gallery of the Royal Castle at Stockholm, a full description may be found in the forty-fifth volume of the Nouvelle Bibliothèque des Belles Lettres. On the galleries of Bruxelles, which were formed by the Archduke Leopold, the following works are the principal. DAV. TENIER'S *Theatrum Pictorum in quo exhibentur ipsius manu delineatæ ejusque cura in æs incisæ picturæ archet. ital. quas Archidux in Pinacothecam suam Bruxellis collegit*, Antwerpiæ, 1660, in fol.; the same work was also published, in 1684, under the title of *Le grand Cabinet des Tableaux de l'Archiduc Léopold*, Amsterdam, 1755, in fol. Upon the dispersed galleries of Charles the First of England are *Catalogue or Description of King Charles the First's Pictures*, London, 1758, in 4to. *A Catalogue of the Collection of Pictures belonging to King James II.; to which is added, a Catalogue of the Pictures of the late Queen Caroline*, London, 1758, in 4to. *Six of his Majesty's Pictures, drawn and engraved from the originals of* P. Veronese, Jac. Tintoretto, old Palma, Jul. Romano, and Andre Schiavone, in the Royal Galleries of Windsor and Kensington, by S. GRIBELIN, London, 1712. We may also add, *Le Recueil des Dessins* du Guerchin, in fol. engraved by BARTOLOZZI, of which the originals are in the various collections of the King of Great Britain. Also BRITTON'S *Catalogue raisonné* of the Marquis of Stafford's gallery; YOUNG'S engraved Catalogues of the Angerstein, Lord Grosvenor's, and Sir John Leicester's galleries. WESTMACOTT'S British galleries. ELMES'S *Catalogue raisonné* of the Dulwich Gallery, printed in the first volume of Annals of the Fine Arts, &c. &c.

Upon the imperial gallery of Vienna the best works are the following: *Catalogue des Tableaux de la Galerie impériale*, par CHRETIEN DE MECHEL, Vienne, 1783, in 8vo. *Réflexions sur la Galerie des Tableaux de Vienne*, Breg. 1785. *Catalogue raisonné de la Galerie des Tableaux de Vienne*, par THIER. RIEGLIER, Vienne, 1786, in 8vo. *Un Recueil en manière noire, gravé* par. J. MANUL. *Theatrum artis Pictorum, quo tabulæ depictæ quæ in Cæs. Vindobon. Pinacotheca servantur, leviore cælatura exhibentur, ab Ant.* Jos. DE PRENNER, Vienne, 1728, in fol. 4 vols. *Un Recueil de trente Feuilles in fol. gravé* par FR. DE STAMPART and ANT. DE PRENNER, Vienne, 1735, entitled, *Prodromus S. Præambulum reserati magnificentiæ theatre*, &c. which gives an account of the then state of that gallery.

Upon the Dresden gallery the best works are *Catalogue des Tableaux de la Galerie électorale de Dresde*, Dresde, 1765, in 8vo. *Recueil d'Estampes d'après les plus célèbres Tableaux de la Galerie royale de Dresde*, Dresde, 1753, in fol. 2 vols.

Upon the Royal gallery of Prussia at Berlin the following works are recommended: *Description des Tableaux qui se trouvent dans la Galerie du Château royal à Berlin*, par J. G. PUHLMANN, Berlin, 1790: this work is in German. *Collection de vingt-cinq Tableaux qui se trouvent à Sans Souci, gravés* par BARTSCH. *Description de la Galerie et du Cabinet du Roi à Sans Souci*, par MATHIEU OESTERREICH, Potsdam, 1764; the same in German, Berlin, 1770, and following year.

Upon the fine gallery of Salzdahlen are *Le Catalogue de la Galerie ducale des Tableaux à Salzdahlen*, Brunswick, 1776, in 8vo. *Artis in valle sallina Theatrum exhibens elegantissimas picturas quas Antonius Uldaricus, D. B. collegit*, Guelph. 1710, in fol. *Description de la Galerie des Tableaux à Schleisheim*, Munich, 1775, in 8vo. *Désignation exacte des Peintures précieuses qui sont en grand nombre dans la Galerie à Dusseldorf*, par GER. JOS. KARSCH, 1719. *Catalogue des Tableaux qui se trouvent dans les Galeries du Palais à Dusseldorf*, Manheim, 1760, in 8vo. *Galerie électorale de Dusseldorf, ou Catalogue raisonné et figuré de ses Tableaux, dans une suite de trente pl. contenant trois cent soixante cinque petites Estampes, gr. d'après ces mêmes tableaux*, par CHR. DE MECHEL, Basle, 1778, 2 vols. in fol. *Recueil de Dessins tirés del' Académie de Dusseldorf*, 1784. *Collection of fifty Etchings by H. Selke and M. Billinger, after the most celebrated paintings at Dusseldorf*, 1787.

There are many fine private collections in Italy described in the following works: *Raccolta di Stampe rappresentati i quadri per scelti dei S.* MARCH. GERINI, t. i. Firenze, 1759, in fol. *Descrizione de cartoni disegnati da* CARLO CIGNANI, *e de quadri dipinti* da S. RICCI, *posseduti* dal S. GIUSEPPE SMITH, Venise, 1749, in 4to. *Description des Tableaux et des Dessins qui*

sont dans la Galerie du Comte ALGAROTTI à Venise, Augsburg, 1780, in 8vo. *Raccolta di quadri i piu eccellenti che si trovano nelle Gallerie e Pilazzi di Firenze*, Firenze, 1779.

Upon those of France, *Les Peintures de* CHARLES LE BRUN *et* d'EUSTACHE LE SUEUR, *qui sont dans l'Hôtel du Chastelet, dessinées* par BERNARD PICART, Paris, 1740, in fol. *Recueil d'Estampes, d'après les plus beaux Tableaux et d'après les beaux Dessins qui sont en France*, Paris, 1729, et suiv. in fol. 2 vols. The prints and engravings which are described in this work have never been collected, and they are mentioned here because they have generally the name of the *Cabinet de Crozat* given to them; but that collection is described by MARIETTE under the title of *Description sommaire des Dessins des grands Maîtres d'Italie, des Pays Bas, et de France, du Cabinet de* M. CROZAT, Paris, 1741, in 8vo. *Recueil d'Estampes d'après les Tableaux des Peintures les plus célèbres d'Italie, des Pays Bas, et de France, qui sont dans le Cabinet de* M. BAYER D'AIQUILLES, gravé par F. COELEMANS, Paris, 1744. *Catalogue des Tableaux, Dessins, &c. de feu M. C. Comte* DE VENCE, in fol. *Catalogue d'un Cabinet de Tableaux*, par M. M. HELLE and GLOMY, Paris, 1752. *Catalogue du Cabinet du* Duc DE TALLARD, Paris, 1756. *Catalogue raisonné des Tableaux, Dessins, et Estampes des meilleurs Maîtres d'Italie, des Pays Bas, d'Allemagne, d'Angleterre, et de France, qui composent différens Cabinets*, par P. REMY, Paris, 1757, in 8vo. *Catalogue historique du Cabinet du Peinture Franc, de* M. DE LA LIVE DE JULLY, Paris, 1764, in 8vo. *Catalogue raisonné des Tableaux de* M. DE JULIENNE, par P. REMY, Paris, 1767, in 12mo. *Catalogue raisonné des Tableaux qui composent le Cabinet de feu* M. GAIGNET, par P. REMY, Paris, 1768. *Catalogue des Tableaux du Cabinet de* M. DE TOLOSAN, Paris, 1792, in 8vo.

Upon the principal galleries of Holland the best works to consult are *Variorum Imagin. à celeberrimis artificibus, pict. cælaturæ apud* GER. RENST, Amsterd. in fol. *Catalogue du rare et précieux Cabinet de Tableaux des meilleurs Maîtres de la Hollande, de même que des Dessins des plus fameux Maîtres, de feu* M. IS. DE WABRAVEN, Amsterdam, 1765.

Concerning the best private collections of England the student may consult *Descrizione delle Pitture nella villa de* MIL. PEMBROKE, Flor. 1754, in 12mo. *A new Description of the Pictures at the Earl of* PEMBROKE's *House at Wilton*, by J. KENNEDY, London, 1758, in 8vo. *Description of the Pictures at Houghton Hall, in Norfolk*, by HOR. WALPOLE, London, 1752, in 4to. *Catalogue of the curious Collection of Pictures of* GE. VILLIERS, D. of BUCKINGHAM, in which is included the valuable collection of P. P. Rubens. *A Catalogue of* S. PET. LELY's capital Collection, London, 1759, in 4to. *A descriptive Catalogue of a Collection of Pictures, selected from the Roman, Florentine, Lombard, Venetian, Neapolitan, Flemish, French, and Spanish Schools, collected by* SIR ROBERT STRANGE, London, 1769. *Liber Veritatis; or, a Collection of two hundred Prints after the original designs of* CLAUDE LORRAIN, *in the possession of the* DUKE OF DEVONSHIRE, in fol.

Of the German collections are *Recueil d'Estampes gr. d'après les Tableaux de la Galerie et du Cabinet du* Comte de BRUHL, Dresde, 1754, in fol. *Recueil de quelques Dessins tirés du Cabinet de* M. Le Comte DE BRUHL, par M. OESTERREICH, Dresde, 1752. *Descrizione completa di tutto cio che ritrovasi nella Galleria di Pittura e Scultura, del* PRINC. DI LICHTENSTEIN, da VINC. FANTI, Vienne, 1767, in 4to. *Catalogue des Tableaux qui se trouvent a Pommersfelde*, Anspach, 1774, in 8vo. *Explication historique des Tableaux recueillis*, par M. GODEPROI WINKLER à Leipsick, par H. KREICHAUF, Leipsic, 1768. *Description du Cabinet des Tableaux de* M. JEAN JACQUES STEIN, Berlin, 1763. *Collection de Tableaux de l'Ecole Italienne, Flamande at Allemande*, par MATTHIEU OESTERREICH, Berlin, 1763, in 4to. *Catalogue des Tableaux de* M. DE WALLMODEN, Leipsic, 1779. *Catalogue des Tableaux qui se trouvent dans la Collection de feu* M. SCHWALBE à Hamburgh, Leipsic, 1780.

Critics often comprise under the name *gallery* the frescoes with which many are painted. The principal works which treat upon or describe these sort of galleries are the following, namely: *La Galerie du Palais Farnèse, peinte* par ANN. CARACCI, *gr. par plusieurs maîtres, dont le principaux sont* C. CESIO, P. AQUILA, JACQUES CHEREAU, &c. *Imagines Farnesiani Cubiculi*, engraved by the same artists. *Galerie peinte dans le Palais des* S. FAVI, *par les frères* CARACCI, *gravée par* GIUSEPPE MITELLI. *Il Claustro di S. Michele in Bosco di Bologna, dipinto dal* LODOV. CARACCI *e da altri maestri. Descrizione dal* S. C. CARLO CES. MALVASIA, *con l'essatto disegno ed intagl del* S. GIAC. GIOVANNI, Bologna, 1696, in fol. *et grave par* FABRI and PAMPHILI, *avec une description de* ZANETTI, 1776, in fol. *Les Tableaux à fresque dans le Palais Magnani à Bologna, peints par les* CARACCI,

et gravés par LE PAUTRE, CHATILLON, &c. *Le Pitture di* PELLEGR. TIBALDI, e di NIC. ABBATI, *esistinti nell' instituto di Bologna, descritte da* GIAMP. ZANOTTI, Venise, 1756, in fol. *Picturæ Franc. Albani, in æde Verospia, gravées par* HIER. TREZZA, 1704, in fol. *La Galerie du Palais Pamphili à Rome, peinte par* BERETINO DI CORTONA, *gravée par* C. CESIO, G. AUDRAN, CH. KOLB. *La Galerie du Palais Sachetti, peinte par le même artiste, et gravée par* FIL. CARACCI. *Heroicæ virtis Imagines Florentinæ in ædibus magni Ducis Hetruriæ, in tribus cameris Jovis, Martis et Veneris, peinte par le même, et gravées par* BLOEMAERT, SIMON BLONDEAU, Rome, 1691. *La grande Galerie de Versailles, et les deux Salons qui l'accompagnent, peinte par* CH. LE BRUN, *designée par* J. B. MASSÉ, *gravée par les meilleurs maîtres, Paris*, 1752. Besides these works there is also an excellent description of the pictures of the Royal Gallery of Versailles by MA. RAINSANT, Paris, 1687. *La petite Galerie d'Apollon au Louvre, peinte par* CHARLES LE BRUN, *gr. par* SIM. RENARD DE SAINT ANDRÉ, in fol. *La Galerie du Palais du Luxembourg, peinte par* P. P. RUBENS, Paris, 1710, in fol.

GARD. *In the history of architecture.* The name of one of the departments of France, in the province of Languedoc, formed out of the diocesses of Alais, Uzes, and Nimes. It is bounded by the Rhone on one side, and is watered by the Gardon, which passes below the Pont du Gard, a splendid specimen of Roman architecture. It is an aquæduct bridge of forty-nine arches, which crosses a valley not less than one hundred and sixty feet deep. See AQUÆDUCT.

GARDENING. See LANDSCAPE GARDENING.

GARLAND. See FLOWERS.

GATE. [geat, Sax.] *In architecture.* The door of a city, castle, palace, or large building. The gate or portal of a building should be considered by the architect as a necessary appendage to his design, and at the same time should accord with it in every thing, should appear to belong to it, and be at the same time an embellishment. Gates should be proportionate to their purpose, and bear appropriate ornaments. See DOOR.

When the Romans intended to build a city, they traced its intended circuit with a ploughshare, raising it where the intended gates were to be erected, which were generally opposite to the principal roads or ways which led to, from, and through the intended city. Leo Battista Alberti has well observed, that great roads or terrestrial ways commence or terminate at the gates of a city, as rivers, canals, or maritime ways in ports and harbours *. The Romans, in the first construction of their city, did not make their gates to their great military roads, but the roads for the gates. Rome had originally but three gates; but when Romulus admitted the Sabines to the privileges of Roman citizens, the circuit of the city was enlarged, the Capitoline hill taken into its boundary, and a fourth gate built on the side of the Capitol. Thus Pliny (lib. iii. c. 5), "Urbem tres *portas* habentum Romulus reliquit, aut, ut plurimus tradentibus credamus quatuor." According to Varro (lib. iv. de lingua latina), the first gate of the city was called *Porta Mutionis*, from the lowing of the herds which were sent in that way from the neighbouring pasturages, the second was called *Romanula* after the name of the city itself, and the third *Janualis*, after the god Janus, whose temple was near to it. "Præterea intra Muros, video portas dici: in Palatia *Mutionis* à mugitu, quod ea pecus in ducitatum antiquam oppidum, exigebant. Alteram *Romanulam*, quæ est dictu à Roma. Tertia *Janualis* dicta à Jano." The fourth ancient gate of Rome was called the *Porta Carmentalis*, from Carmenta the Arcadian prophetess, the mother of Evander, who resided near to it. This gate was afterwards called *Porta Scelerata*, because through this gate the three hundred and six *Fabii* went out, who, fighting at the river Cremara against the Etruscans, were all slain. Solinus, the imitator of Pliny, mentions the fact of Carmenta. Livy, in the seventeenth book of his history, and Plutarch, in his Life of Camillus, mentions this ancient gate, as does Virgil in the eighth Æneid;

"Et Carmentalem Romano nomine Portam."

In these times the city of Rome was nearly square in its form, to enter and leave which these four gates were sufficient. But in subsequent ages, its boundaries becoming dilated many times, these gates were insufficient. Numa Pompilius added to the city a part of Mount Quirinal, and as the people increased greatly under the successive kings, Tullus Hostilius took in Mount Cœlius; Ancus Martius the Janiculum; Servius Tullius the rest of the Quirinal and the Viminal. Long

* Viarum quidem, et earum, quæ extra urbem sunt, et earum, quæ intra urbem sunt, caput, et quasi terminus quidam, est terrestribus Porta: maritimis nisi fallimur, Portus. LEO BATT. ALBERTI, *de re ædificatoria*, lib. viii. c. 6.

time afterwards, Sylla, Julius Cæsar, Augustus, and Tiberius, successively augmented its dimensions, but Nero, after setting fire to the city, enlarged it still more. Trajan added his part, and Aurelian also, who first surrounded the Campus Martius with its enclosure.

The gates of ancient cities were generally formed with a central opening for carriages, and two smaller ones at the sides for pedestrians; such as are seen at Pompeii, and other ancient cities.

The gates to the ancient temples were always of sufficient height that the lintel or architrave, which covered them, was of the same height with the capitals of the columns of the portico. Such are the gates of the temple of Theseus, of the small Ionic temple near the Ilyssus, and of the Pantheon at Rome. The general form of the ancient doors or gateways to the temples was a parallelogram, but Vitruvius says that some of them were wider at the bottom than the top, as in the examples of the circular temples of Vesta at Tivoli, and the Doric temple at Cora.

Vitruvius mentions three sorts of gates to temples, which he denominates *Doric*, *Ionic*, and *Attic*. The former appertaining to the Doric order, the second to the Ionic, and the third to the Corinthian.

London had formerly several gates, before its walls were removed, of which there are now scarcely any remains, but Temple Bar. They possessed neither beauty nor design to recommend them.

GEM. [*gemma*, Lat.] *In sculpture.* A jewel, a precious stone of any kind. The word *gem* did not, in its primitive sense, mean, as at present, precious stones. The Greeks termed them Λίθοι λιμοι, that is, noble or precious stones, or Λίθοι simply, that is, *stones* by way of excellence, and λίθοι διαφάνειες, those which were transparent. The word *gemma* is found in Pliny and other ancient writers to mean pearls and precious stones. The classification of gems, belongs to a work on mineralogy, or crystallography, and is therefore omitted.

The harder kinds of gems, as the diamond, the emerald, &c. were seldom engraved upon by the ancient from their difficulty (see DIAMOND); but the substances most frequently sculptured by engravers, both ancient and modern, are rock crystal, of different colours, jasper, calcedony, cornelian, onyx, blood stone. Rock crystal, is not of sufficient hardness, cornelian and calcedony are of the same family, and are principally distinguished by the tinge of their colours. One of the most favourite gems of the ancients was the cornelian, on which all the ingenuity of the sculptor's art has been assiduously bestowed. Its colour, hardness, and texture are the most favourable for delicate engravings, and it seems to have been diffused in much greater abundance than any other. See CORNELIAN.

Among the ancients, the Egyptians practised gem sculpture with the greatest success, both in intaglio and in relief, but more commonly the former. Those preserved to our times are for the most part called *scarabæi*, from the figure resembling a beetle, and consist of green jasper, cornelian, and calcedony. The Jews probably learned engraving from the Egyptians, and the books of Moses, bear witness in the description of the ephod of Aaron, of their skill in this department of the arts, but the commandment prohibiting the representation of any animal or thing, confined it to engravings of names, &c. as seals.

The Greeks, before the decline of their country, and their artists being taken to Rome, surpassed all others in the art of sculpturing gems and precious stones. The same refined taste, which pervaded their architecture, their painting, and their sculpture; accompanied their efforts in all their other arts, particularly gem sculpture.

Among their leading artists in gem sculpture are Mnesarchus, the father of Pythagoras, and, according to Millin (who has attempted the arduous task of arranging them in chronological order, with as much success as indefatigable industry and great knowledge of his subject could accomplish); those who flourished anterior to the era of Alexander, he supposes were Theodore of Samos, who engraved a lyre on a famous emerald belonging to the king Polycrates, seven hundred and fifty years before Christ, which the owner, to mortify himself, threw into the sea; Mnesarchus, before mentioned, none of whose works are extant; Heius, Phrygillus, Thamytos. Pyrgoteles was cotemporary with Alexander, who is reported to have issued an edict prohibiting all other artists from engraving his portrait. Between this era, and that of Augustus, he enumerates Admone, Apollonides, Polycletes, who was also a statuary, Tryphon, whose period is well ascertained, and others of minor celebrity. The list becomes more numerous as we descend the stream of time; Aulus, Chronius, and especially Dioscourides, to whom some of the most beautiful works are ascribed, and who engraved the Roman Emperor Augustus; Alphæus Ehvodus, Antiochus, Æpolian, flourished in the age

of his immediate successors; but the exact period of the greater number cannot be ascertained. Some of the most celebrated of them are Ætian, Agathemeros, Allion, Apollodotus, said to be the first gem engraver who added his profession to his name; Pamphilus, whom some have supposed to have been a pupil of Praxiteles, and who engraved upon an amethyst, Achilles playing on a lyre; Teucer, Carpus, and others, whose names would protract the catalogue to an unnecessary length.

Among the Roman artists, M. Millin includes all those whose names do not appear of Greek origin, or are written in Latin; such as Aquilus, Felix, Quintillus, Rufus, and a few more. The Greeks still preserved their taste for engraving on fine gems, during the earlier part of the darker ages; nor was it obliterated entirely among the Romans. Circumstances were now adverse to the arts, and they fell, and the beautiful art of gem sculpture with them. Here the history of antique engraved gems terminates; because the empire of the ancients being overrun by barbarians, the arts sunk into insignificance, and those which had flourished with the greatest luxuriance, were nipped by the frosts and gloom of ignorance.

Among the gems of the ancients, that called the Obsidian has excited the greatest controversy. The history of sculpture and of engraving, says the Chevalier de Lorgna, who has discussed this curious subject at much length, in the Mercurio Italico, the substance of which is here quoted, together with the contemplation of the relicks, which still remain of the productions of the ancients on this subject, fill us with just admiration as well on account of the perfection of workmanship, as of the variety of the materials which the artist made use of.

Wood, ivory, metals, glass, marbles, the hardest stones, and even gems became animated in the ingenious hands of the Egyptians, Etruscans, Greeks, and Romans. It is not easy, but would not be an idle undertaking, to investigate what metallick compositions were used for the statues, coins, and medals in the flourishing times of Egypt, down to those of Rome, and to which of our stones the ancient names are correspondent.

There is no gem or stone mentioned by Theophrastus and Pliny but what offers matter for a very curious investigation; and even the Obsidian, on which the penetrating genius of the celebrated and learned antiquary Count de Caylus so much exercised itself, what it was, still remains to be determined.

The variety of opinions of the learned and the naturalists upon this subject is a sufficient proof of this assertion. Cesalpino is a marble; which Boetis thought to be an agate; Isidorus of Seville a glass; and Caylus's aim in his writing is to show that the Obsidian stone of the ancients was only volcanic glass*. Nothing but a hasty reading of Pliny's works can have given rise to so many doubts, which will quite vanish as soon as a deliberate and due reflection attends investigation.

It is perfectly clear, from reading this last Latin writer, that the ancients were acquainted with an Obsidian stone, an Obsidian glass, and an Obsidian gem; which three substances, very different one from the other, were only similar in their black colour.

First of all, there was a black marble which was Obsidian (lapis Obsidianus, or marmor Obsidianum), because it was first found out in Ethiopia by a person called Obsidius†; and this black marble was similar to many which are now known, and perhaps more particularly to those which, being rubbed hard, send forth a bitumous smell‡. This circumstance alone serves absolutely to distinguish it from a species of glass, as Caylus asserts; and Pliny (l. xxxvii. ch. 36) himself clearly demonstrates it, saying that, among the species of glass, there was one of a very black colour, called Obsidian, on account of the resemblance it bore to the abovementioned marble, which was formerly found in Ethiopia by Obsidius.

Hence the true Obsidian marble was different from the Obsidian glass mentioned by the same author. He informs us that this glass had a degree of transparency; that it had a greasy appearance; and that they made of it mirrors, and statues, and set it in rings (l. xxxvi. ch. 26).

In this Caylus is right, that the four elephants dedicated by Augustus to the temple of Concord, and the statue of Menelaus found in Egypt, were evidently made of such materials; but these statues, like the celebrated and unique Barberini

* The celebrated Jussius, together with Masault and Roux, contributed to the composing of the elaborate discourse which, upon this subject, Count Caylus delivered the 10th June, 1760, in the Academy of Inscriptions and Belles Lettres.

† See Pliny, b. 37, chap. 26, and Savary's Letters in Egypt, who mentions a black marble found in those countries.

‡ Arrian asserts it, and Hill finds a testimony of it in an uncertain Greek author.

vase, were certainly of artificial, and not of volcanic glass; since Pliny mentions them in order to prove that the invention of the art of making glass was very ancient, which would be of no manner of use if they had been made of natural volcanic glass. They made, in fact, an artificial opaque and black glass, for which reason it was called Obsidian, as is observed a little before; and Pliny particularly informs us, that with this, after the manner of modern glass, vessels of terra cotta were done over. It is uncertain whether any such volcanic glass exists, except perhaps some seals. But this is not the case with Obsidian stone, a species of black marble, of which many antiques are to be found in different museums, and of which the beautiful sleeping child of the Royal Gallery of Florence, called the god of Sleep, may perhaps be made.

Besides the Obsidian marble and Obsidian glass, either artificial or natural, there is the Obsidian gem, of which none has clearly treated, and which was confounded by writers with the Obsidian marble, as was the case with the glass, and yet Pliny names it without equivocation, saying, that there were to be found also jewels of the same name and colour, that is, Obsidian black ones, not only in Ethiopia and in India, but also in Abrusso, as some maintain, and in the neighbourhood of the Spanish Sea. This gem was less hard than others, and it was found to be of a similar colour with the Obsidian stone or marble. Who does not perceive the modern opaque and black scorrillo in this ancient Obsidian gem? its colour, its hardness, are most convincing proofs of it, as Pliny himself mentioning this last circumstance, says (b. 17, chap. 13), the pieces of Obsidian do not scratch true gems, and these, on the contrary, mark and cut them. The places where the Obsidian gem and the scorrillo used to be found in ancient times still afford some in our own days, and they are moreover to be found in other parts, which were unknown before. Breislac says he has met with scorrillo on the way to Frescati, and especially one of an hexagonal prism, ending in two opposite triangular pyramids, formed by the reunion of three pentagonal surfaces. Gorgona, as also the Island of Giglio, produce some of them, which are of no indifferent size.

We find no mention made of what might have been the largest size of the ancient Obsidian gems, but in our days some have been found of several inches in length in the said Tuscan islands. Sage describes a group of them brought from Greenland, which is preserved in the Royal School of Mines, Paris, and is formed of seven regular prisms, with nine surfaces, two inches high and one and a half in diameter, having some triangular pyramids over them; and De Jubert has one of them in his private cabinet of seven inches and a half in length, and not less than eleven inches in circumference.

Nature, which is every where the same, has given to scorrilli or Obsidian gems of Tuscany an equal form and colour with those of Greenland, Britain, Spain, Madagascar, Ceylon, &c. and they all exactly agree with the description of the ancient Obsidian gem, and perfectly resemble, by their very beautiful blackness, the black marble or Obsidian stone, and not less so the Icelandic agate or volcanic black glass*, called by the ancients Obsidian glass. Among gems the Obsidian are less hard, that is to say, in fact, that we cannot scratch other gems with the Obsidian or scorrilli, but with the former, we may easily cut the latter. It appears evident, therefore, that Pliny's Obsidian gem is absolutely the modern black scorrillo, which ought to be called, after its ancient name, Obsidian, expunging from modern books the barbarous words schioerl, sciorl, and scorlio, as some German writers name it; or to call it at least Obsidian scorrillo, to distinguish it from other species. The Obsidian scorrilli of Greenland are almost all endowed with the singular property of becoming electrical when they are heated; and likewise some, though more rarely, among those of Madagascar and of Tuscany. This property, which once served to distinguish a pretended peculiar kind of stone with the name of tourmalin, cannot now be considered but a simple epithet expressing variety; and so we might call scorrillo Obsidian turmalina, that which is endowed with electrical property, or to call it more clearly, Obsidian electrical scorrillo.

This last wonderful property was not unknown to the ancients; for, it appears, they knew it to exist in the gem which they called ligurio†, and without any doubt

* Some of this Obsidian natural glass is likewise to be found in Tuscany, as also in many other parts of both continents. The Italian is of a beautiful black, rather inclining to a chestnut colour; that of Lipari inclining to azure; that of Hecla is black and opaque; that of Peru yellowish; all of them have such a degree of hardness, as to strike fire and cut glass.

† What can this stone ligurio be but a different species of scorrillo? It was common in the territory of Genoa, and on the mountains inhabited by Ligurians. Of this we find a testimony in Strabo, p. 202, Paris ed.

in various species of carbuncle, and also in the carchedonius. Pliny mentions that he found carbuncles, some of a purple colour, others red, which, heated by the sun, attracted straw and paper shavings: here we clearly see in them the turmalines of a red colour of Ceylon, &c. Among the species of carbuncles the same writer mentions one called carchedonius, which, after Archelaus, he represented to be of a blacker colour, and that it has the same property of becoming electrical by heat; and, after Satyrus, he adds, that it is generally of a dark colour, parched and bright. It is very clear that they are the same as the Ceylonese turmalines, as Corsali says in his Voyages, that such stones are found in the island of Ceylon.

The properties described by Pliny as belonging to the turmalines and scorrilli are alike, that is, they are but little adapted for seals, and being too soft for incision, from retaining part of the wax; hence it is that we have no engravings on those gems, the use of them having been soon laid aside. From the report of the same author, the art of making statues and other works of sculpture with the volcanic Obsidian stone, was soon relinquished as being too similar to glass. Other properties, also mentioned by Pliny, are exactly to be found in the turmalines and scorrilli, or in the electrical or non-electrical scorrilli, that is to say, they are not effected by fire, for which reason they were by some called apiroti. The Duke of Noja, in his letter to Count Buffon, observes, that of all the stones which he had put to the trial of fire, to determine their electricity, the diamond alone can, like the turmaline, be safely and suddenly exposed to a quick fire; others burst or break more or less quickly, especially the most transparent ones; and this is, perhaps, the meaning of Pliny's expression, who says of them they are not affected by fire.

I think I have now a right to conclude, says the Chevalier, 1. That the Obsidian gem is not the Obsidian glass, and that is not the marble or the Obsidian stone of the ancients, as Caylus pretends. 2. That the ancients were acquainted with an Obsidian marble, an Obsidian natural glass, and with an artificial one; and finally with an Obsidian gem, very different from the rest. 3. That the black scorrilo is the true Obsidian gem of the ancients. 4. That the electrical properties of some scorrilli were known to them, and therefore they were distinguished, even in those times, by different names, although natural history was not then considered by philosophers with a sufficient degree of seriousness. 5. That it would be proper now to restore, at least in part, the ancient name, calling with the general appellation of scorrillo those that are black, opaque, and electrical; the red turmaline of Ceylon, scorrilli electrical carbuncle; those scorrilli or turmalines, smoked and of a pitchy colour electrical or non-electrical, scorrilli, charchedory, and in this manner bring back these things to a more exact and proper denomination.

Among the Romans, as the editor of Worlidge's *gems* has observed, Dioscourides engraved the head of Augustus before alluded to, in so masterly a manner, that the succeeding emperors advanced it to the honour of being the imperial signet. Among the latter emperors the luxury of wearing gems about the person was carried to an extravagant height. Juvenal informs us that there was a distinction in the weight of the summer and winter ring; and Martial wittily reminds a freedman, who indulged this folly to a ridiculous extent, that the size of his ring was better suited to his former condition than his present, resembling more the link of a fetter than a personal ornament. Heliogabalus was attacked by Lampridius for covering his shoes and stockings with engraved gems, as if the elaborate work of the gem sculptor could be admired in a seal-ring worn on the toes.

The art of *gem sculpture* was revived in Italy, about the middle of the fifteenth century, and many of the productions of that age may deservedly hold the next rank to the antique. Among the most successful of the moderns are Pickler and Pistrucci, who now holds a situation in our mint, the late Henry Burch, R. A. and the inimitable Marchant, whose works, even in Rome, are held in the highest estimation.

Winckelmann has published an enumeration of some of the finest gems in the world, to which work the reader is referred for more detailed information. Among them are a most exquisite Cameo of Perseus and Andromeda, in such high relief, that almost all the contour of the figures, in the most delicate white, are detached from the ground. It belonged to Mengs, the painter, at whose death it was purchased by the Empress Catherine of Russia for three thousand Roman crowns. The only other gem which Winckelmann is disposed to class in the same rank is the Judgment of Paris, in Prince Piombino's cabinet at Rome. The Marlborough gem of Cupid and Psyche, has perhaps more celebrity than any other in England. The moderns imitate the genuine cameos by

workmanship in shells, in many instances not easily distinguishable from that on stones.

The most celebrated engraved collection of gems is that by PICART from the *Cabinet of De Hosch;* those of FABER from the *Ursini Cabinet;* and of BRUSTOLON are indifferent; LEONARD AUGUSTUS is still worse. Count CAYLUS engraved three hundred plates of the Royal Collection of France, but they are unworthy of his reputation. In England we have one hundred and eighty plates, well etched by Worlidge, from the collections of Lord Montague, Lord Besborough, Sir Thomas Dundas, and others; and two distinguished works, printed only for private distribution, the Marlborough and Devonshire gems; the latter book, being one of the rarest in the world in its perfect state, as, owing to the misconduct of the engraver, it is believed there is not more than one copy extant, which contains all the plates, though the liberality of the noble proprietor had wished to give the work extensive circulation. Relative to the art of *gem sculpture* are some essays in the seventh volume of *La Bibliothèque d'histoire naturelle* de M. BŒHMER; some treatises by M. BRUCKMANN; the *Collectanea* of LESSING; his *Lettres sur quelques sujets d'Antiquité; l'Introduction à l'Etude des pierres gravées*, par MILLIN, and a work with a similar title by M. GURLITT, in German; *Le Traité des pierres précieuses*, par DUTENS; the Mineralogy of HAUY; and other modern writers on the same subject.

GEM SCULPTOR and SCULPTURE. See GEM.

GENEVA (oppidum allobrogum). *In the history of the arts.* A city in Switzerland, and capital of an ancient and independent republic of the same name. It is situated on the confines of Savoy and France, at the southern extremity of the Lake of Geneva, where the Rhone issues from it in two rapid transparent streams of a beautiful blue colour, which unite after passing the city.

Geneva is surrounded, except towards the lake, with high walls and fortifications, which were begun at the commencement of the seventeenth century under the direction of Agrippa D'Aubigne. The building of the bastion of Hesse, which is well worthy of being visited by strangers, cost no less than ten thousand crowns, which Philip, Landgrave of Hesse, had given to the republic for this purpose. The southern gate of the city is remarkably beautiful. The double ditches round this gate are filled with water.

The town of Geneva is irregularly built, some of the streets are extremely steep. The houses are lofty, consisting frequently of four or five stories; and in the commercial part of the town, particularly in the Rue Basse, they have gloomy arcades of wood, supported by huge wooden pillars, which rise to the very top of the house, and thus protect the foot passengers from the effects of the sun and the rain. In this street there are two rows of low wooden shops in front of the houses, separating the street from the foot pavements.

The principal public edifices and establishments are the cathedral of St. Peter's; the Hotel de Ville; the arsenal, the college; the public library; the hospital; the theatre; and the places of worship. The cathedral, situated in the upper part of the town, is a large modern church of Gothic architecture in the interior, with a fine organ, and windows of painted glass. The portal is in imitation of that of the Pantheon at Rome. It is built of rough marble, and consists of a fine peristyle of six Corinthian columns supporting a pediment, which is surrounded by an ugly substitute for a cupola, covered with tin. In the time of the Allobroges and the Romans, a temple, consecrated to the sun, occupied the spot on which the cathedral now stands.

The college is a quadrangular building. Each class has a separate and commodious school-room on the ground floor, so as to occupy the two sides of the quadrangle, and the upper part of the building contains apartments for the use of the principal or general inspector, and for the public library of the city.

One of the chambers of the library contains a collection of optical and mathematical instruments, anatomical preparations, and antiquities. Among these is an antique circular buckler of silver, thirty-four ounces in weight, with the following inscription: *Largitur D. N. Valentiniani Augusti.* It was found in the bed of the Arve in 1721, and it is the only one of the kind in existence, excepting that which is preserved in the Royal Library of Paris. The library is also adorned with paintings of several eminent men; and at one end of it is a fine bust of Charles Bonnet, the celebrated naturalist. One of the halls of the college contains several models in gypsum of ancient statues, groups, busts, and bas-reliefs, and also some fine paintings of St. Ours and De la Rive.

GENII. [Lat.] *In the mythology of art.* Moral deities who presided over the vir-

tues of men and the conduct of human life. The *genii* of the ancients were a sort of divinities that were supposed constantly to attend each single person from his birth to his death, and to begin to exist with those they were to attend, and to cease to exist when they died. The *genii* of the women were called *Junones* (Plin. Nat. Hist. c. vii), and they swore by them, as did also their lovers at times (Tib. l. iv. el. 13, v. 16). This shows the force of a line in Juvenal (sat. ii. v. 98.)

The poets say nothing of the dress or attributes of these deities, but in some antiques and on medals they are dressed like the persons over whom they preside. Thus the *genius* of a vestal, in an ancient statue, is in the habit of that order; and on a medal of Julia Mammæa, the genius is in the dress of the Roman empresses, holding the emblem of *Hope* (or spes) a rose bud in one hand, and of *virtus* in the other, to signify that the genius of that empress was the defence and hope of the empire.

In MILLIN'S *Recueil de Monumens inédits* are several representations of Greek vases with winged genii; and in the fourth volume of the *Museo Pio Clementino* in a sarcophagus is a child encircled by bacchanalian genii, all with wings. A very fine statue of bronze, of the most beautiful symmetry, is published in the *Museum Florentinum*, and others in the *Museum Etruscum*, and in the *Marmora Pisaurentia;* from which the artist may gather sufficient knowledge of the forms and attributes of the ancient *genii*.

GENIUS. [Lat.] *In all the arts.* That disposition of nature by which any one is qualified for some peculiar employment. The spirit of a man, his nature itself. Sir Joshua Reynolds defines this mental gift or faculty to be "a power of producing excellences, which are out of the rules of art; a power which no precepts can teach, and which no industry can acquire." And again, "what we call genius begins, not where rules, abstractedly taken, end, but where known vulgar and trite rules have no longer any place."

GENOA. *In the history of the arts.* A celebrated city in the north of Italy, on the northern shores of the Mediterranean, formerly *Genua a Jano*, from *Genuo*, a son of Saturn, who founded it, the chief city of Liguria. It is built in the form of an amphitheatre, on the slope of a mountain rising gradually from the sea, having for a centre the harbour, which is of very considerable extent. The external appearance is extremely magnificent.

In no other city in the world is there to be found such a profusion of marble, and other rich materials, both in public and private edifices; while their situation on terraces, ascending one above the other, adds an additional degree of splendour to their appearance. On entering the city, however, the narrowness and darkness of the streets produce a mean effect, but ill corresponding with its magnificent exterior, although lined with palaces of vast and lofty dimensions, some entirely of marble, and all ornamented with marble portals, porticos, and columns. The interior of these mansions are no less magnificent. The staircases are of marble, and the long suites of spacious saloons, opening into each other, are adorned with the richest marbles and tapestries, with valuable paintings, and gilded cornices and panels. Of these the most remarkable are those of the Doria, Durazzo, Balbi, and Serra families. The first of these (consecrated by the recollection of the restorer of his country's liberties) is a beautiful specimen of a pure and simple style of architecture, by Rocca Lurago, a Lombard architect, who flourished about the year 1570, but in magnitude and splendour it is far supassed by the Durazzo palace, a work of Bartolomeo Bianco, also a Lombard, which, both in its materials and furniture, is superior to the abodes of most of the sovereigns of Europe.

The public buildings of Genoa are no less splendid than the abodes of her citizens; but the profusion of party coloured marbles and gilding, which gives an air of wealth and grandeur to the palaces, is offensive to the eye of taste in churches and temples, where all unnecessary and gaudy ornaments detract from the simplicity which should always characterize such edifices. Of this description are the cathedral of St. Lawrence, the churches of the Annunciation, St. Siro, and St. Dominic. That of Santa Maria di Carignano is in a purer style, and placed in a very commanding situation. It was built about the middle of the sixteenth century, at the expense of Bendinelli Sauli, a noble citizen of Genoa, from the designs of Galeazzo Alessi of Perugia.

The approach to this church is by a lofty bridge of three arches, about ninety feet high, across a deep dell, now a street. Genoa owes this building also to the munificence of the Sauli family. It was begun by the grandson, and finished in the year 1725 by the great-great grandson of the founder of the church di Carignano. See SIEMONDI'S *Histoire des Republiques*

Italiennes; ACCINELLI's *Revolutions of Genoa;* EUSTACE's *Classical Tour through Italy,* &c.

GEOMETRY. [*geometria,* Lat. Γεωμετρία, Gr.] *In all the arts,* but more especially *in architecture.* The science of extension, quantity, or magnitude abstractedly considered; demanding the greatest attention from the scientific artist.

"There is a certain degree of geometrical knowledge," says an able writer in Dr. Brewster's Encyclopædia, "which naturally arises out of the wants of man in every state of society. It is impossible to build houses and temples, or to apportion territory, without employing some of the principles of geometry. Hence we cannot expect to find a period of society or a country in which it was altogether unknown."

"Ancient writers have generally supposed that it was first cultivated in Egypt; and, according to some, it derived its origin from the necessity of determining every year the just share of land that belonged to each proprietor, after the waters of the Nile, which annually overflowed the country, had returned into their ordinary channel. It may, however, be remarked, that the obliteration of the landmarks by the inundation is quite a conjecture, and not a very probable one.

Some writers, among whom is Herodotus, fix the origin of geometry at the time when Sesostris intersected Egypt by numerous canals, and divided the country among the inhabitants. Sir Isaac Newton has adopted this opinion in his Chronology, and has supposed that this division was made by Thoth, the minister of Sesostris, who, according to him, was the same as Osiris; and this conjecture is supported by some ancient authorities. Aristotle has, however, attributed the invention to the Egyptian priests, who, living secluded from the world, had leisure for study. Thus various opinions have been entertained respecting the origin of geometry, but all have agreed in fixing it in Egypt.

The celebrated philosopher, Thales of Miletus, transplanted the sciences, and particularly mathematics, from Egypt into Greece. He was born about six hundred and forty years before Christ, and being unable to gratify his ardent desire for knowledge at home, he travelled into Egypt at an advanced period of life, where he conversed with the priests, the only depositories of learning in that country. Diogenes Laertius relates, that he measured the height of the pyramids, or rather the obelisks, by means of their shadow; and Plutarch says, that the King Amasis was astonished at this instance of sagacity in the Greek philosopher; which is a proof that the Egyptians had made but little progress in the science. It is also stated by Proclus, that Thales employed the principles of geometry to determine the distance of vessels remote from shore. On his return to Greece, his celebrity for learning drew the attention of his countrymen; he soon had disciples, and hence the foundation of the Ionian school, so called from Ionia, his native country.

There were some slight traces of what may be called natural geometry in Greece, before the time of Thales. Thus Euphorbus of Phrygia is said to have discovered some of the properties of a triangle; the square and the level have been ascribed to Theodorus of Samos; and the compasses to the nephew of Dædalus. But these can only be considered as a kind of instructive geometry; the origin of the true geometry among the Greeks must be fixed to the period of the return of Thales. It was he that laid the foundation of the science, and inspired his countrymen with a taste for its study; and various discoveries are attributed to him, concerning the circle, and the comparison of triangles. In particular, he first found that all angles in a semicircle are right angles; a discovery which is said to have excited in his mind that lively emotion which is perhaps only felt by poets and geometers: he foresaw the important consequences to which this proposition led, and he expressed his gratitude to the muses by a sacrifice. This, however, is but a small part of what geometry owes him; and it is much to be regretted, that the loss of the ancient history of the science should have left us in uncertainty as to the full extent of the obligation.

It is probable that the greater number of the disciples of Thales were acquainted with geometry; but the names of Ameristus and Anaximander only have reached our times. The first is said to have been a skilful geometer; the other composed a kind of elementary treatise or introduction to geometry, the earliest on record. Thales was succeeded in his school by Anaximander, who is said to have invented the sphere, the gnomon, geographical charts, and sundials; he was succeeded by Anaximenes; and this philosopher again was succeeded by his scholar Anaxagoras, who, being cast into prison on account of his opinions relating to astronomy, employed himself in attempting to square the circle.

This is the earliest effort on record to resolve the most celebrated problem in geometry.

Pythagoras was one of the earliest and most successful cultivators of geometry. He was born about 580 years before the Christian era; he studied under Thales, and by his advice travelled into Egypt. Here he is said to have consulted the columns of Sothis, on which that celebrated person had engraven the principles of geometry, and which were disposed in subterranean vases. A learned curiosity induced him to travel also into India; and it is far from being improbable, that he was more indebted for his knowledge to the Brahmins, on the banks of the Ganges, than to the priests of Egypt. On his return, finding his native country a prey to tyranny, he settled in Italy, and there founded one of the most celebrated schools of antiquity. He is said to have discovered that, in any right angled triangle, the square on the side opposite the right angle is equal to the two squares on the sides containing it; and, on this account, to have sacrificed one hundred oxen to express his gratitude to the muses. This, however, was incompatible with his moral principles, which led him to abhor the shedding of blood on any account whatever; and besides, the moderate fortune of a philosopher would not admit of such an expensive proof of his piety. The application which the Pythagoreans made of geometry gave birth to several new theories, such as the incommensurability of certain lines, for examples, the side of a square and its diagonal, also the doctrine of the regular solids, which, although of little use in itself, must have led to the discovery of many propositions in geometry. Diogenes Laertius has attributed to Pythagoras the merit of having discovered that, of all figures having the same boundary, the circle among plain figures, and the sphere among solid figures are the most capacious: if this was so, he is the first on record that has treated of isoperimetrical problems.

The Pythagorean school sent forth many mathematicians; of these, Archytas claims attention, because of his solution of the problem of finding two mean proportionals; also on account of his being one of the first that employed the geometrical analysis, which he had learned from Plato, and by means of which he made many discoveries. He is said to have applied geometry to mechanics, for which he was blamed by Plato; but probably it was rather for applying, on the contrary, mechanics to geometry, as he employed motion in geometrical resolutions and constructions.

Democritus of Abdera studied geometry, and was a profound mathematician. From the titles of his works it has been conjectured that he was one of the principal promoters of the elementary doctrine respecting the contract of circles and spheres, and concerning irrational numbers and solids. He treated besides of some of the principles of optics and perspective.

Hippocrates was originally a merchant, but having no turn for commerce, his affairs went into disorder; to repair them, he came to Athens, and was one day led by curiosity to visit the schools of philosophy. There he heard of geometry for the first time; and it is probable there is a natural adaptation of certain minds to particular studies; he was instantly captivated with the subject, and became one of the best geometers of his time. He also was the first that composed Elements of Geometry, which, however, have been lost, and are only to be regretted, because we might have learned from them the state of the science at that period. It has been said that, notwithstanding his want of success in commerce, he retained something of the mercantile spirit: he accepted money for teaching geometry, and for this he was expelled the school of the Pythagoreans. This offence we think might have been forgiven, in consideration of his misfortunes.

Two geometers, Bryson and Antiphon, appear to have lived about the time of Hippocrates, and a little before Aristotle. These are only known by some animadversions of this last philosopher on their attempts to square the circle. It appears that before this time geometers knew that the area of a circle was equal to a triangle, whose base was equal to the circumference, and perpendicular equal to the radius.

Having briefly traced the progress of geometry during the two first ages after its introduction into Greece, we come now to the origin of the Platonic school, which may be considered as an æra in the history of the science. Its celebrated founder had been the disciple of a philosopher (Socrates) who set little value on geometry; but Plato entertained a very different opinion on its utility. After the examples of Thales and Pythagoras, he travelled into Egypt, to study under the priests. He also went into Italy to consult the famous Pythagoreans, Philolaus, Timæus of Locris, and Archytas, and to Cyrene to hear

the mathematician Theodorus. On his return to Greece, he made mathematics, and especially geometry, the basis of his instructions. He put an inscription over his school, forbidding any one to enter that did not understand geometry; and when questioned concerning the probable employment of the Deity, he answered, that *he geometrized continually*, meaning, no doubt, that he governed the universe by geometrical laws.

It does not appear that Plato composed any work himself on mathematics, but he is reputed to have invented the geometrical analysis. The theory of the conic sections originated in this school; some have even supposed that Plato himself invented it, but there does not seem to be any sufficient ground for this opinion.

These discoveries must be attributed to the Platonic school in general; for it is impossible to say with whom each originated. Some of advanced years frequented the school as friends of its celebrated head, or out of respect for his doctrines; and others, chiefly young persons, as disciples and pupils. Of the first class were Loadamus, Archytas, and Theætetus, Laodamus was one of the first to whom Plato communicated his method of analysis, before he made it public; and he is said by Proclus, to have profited greatly by this instrument of discovery. Archytas was a Pythagorean of extensive knowledge in geometry and mechanics. He had a great friendship for Plato, and frequently visited him at Athens; but in one of his voyages he perished by shipwreck. Theætetus was a rich citizen of Athens, and a friend and fellow student of Plato under Socrates, and Theodorus of Cyrene, the geometer. He appears to have cultivated and extended the theory of the regular solids.

Passing over various geometers who are said to have distinguished themselves, but of whom hardly any thing more than the names are now known, we shall only mention Menæchmus and his brother Dinostratus. The former extended the theory of conic sections, insomuch that Eratosthenes seems to have given him the honour of the discovery, calling them *the curves of Menæchmus*. His two solutions of the problem of two mean proportionals are a proof of his geometrical skill. Several discoveries have been given to Dinostratus; but he is chiefly known by a property which he discovered of the *quadratrix*, a curve supposed to have been invented by Hippias of Elis.

The progress of geometry among the Peripatetics was not so brilliant as it had been in the school of Plato, but the science was by no means neglected. The successor of Aristotle composed several works relating to mathematics, and particularly a complete history of these sciences down to his own time: there were four books on the history of geometry, six on that of astronomy, and one on that of arithmetic. What a treasure this would be, did we now possess it!

The next remarkable epoch in the history of geometry, after the time of Plato, was the establishment of the school of Alexandria, by Ptolemy Lagus, about 300 years before the Christian æra. This event was highly propitious to learning in general, and particularly to every branch of mathematics then known; for the whole was then cultivated with as much attention as had been bestowed on geometry alone in the Platonic school. It was here that the celebrated geometer, Euclid, flourished under the first of the Ptolemies: his native place is not certainly known, but he appears to have studied at Athens, under the disciples of Plato, before he settled at Alexandria. Pappus, in the introduction to the seventh book of his collections, gives him an excellent character, describing him as gentle, modest, and benign towards all, and more especially such as cultivated and improved the mathematics. There is an anecdote recorded of Euclid which seems to show he was not much of a courtier: Ptolemy Philadelphus having asked him whether there was any easier way of studying geometry than that commonly taught; his reply was, "There is no royal road to geometry." This celebrated man composed treatises on various branches of the ancient mathematics, but he is best known by his Elements, a work on geometry and arithmetic; in thirteen books, under which he has collected all the elementary truths of geometry, which had been found before his time. The selection and arrangement have been made with such judgment, that, after a period of two thousand years, and notwithstanding the great additions made to mathematical science, it is still generally allowed to be the best elementary work on geometry extant. Numberless treatises have been written since the revival of learning, some with a view to improve, and others to supplant the work of the Greek geometer; but in this country, at least, they have been generally neglected and forgotten, and Euclid maintains his place in our schools.

Of Euclid's Elements, the first four books treat of the properties of plane-

figures; the fifth contains the theory of proportion; and the sixth its application to plane figures; the seventh, eighth, ninth, and tenth relate to arithmetic, and the doctrine of incommensurables; the eleventh and twelfth contain the elements of the geometry of solids; and the thirteenth treats of the five regular solids, or *Platonic bodies*, so called because they were studied in that celebrated school: two books more, viz. the fourteenth and fifteenth, on regular solids, have been attributed to Euclid, but these rather appear to have been written by Hypsicles of Alexandria.

Besides the elements, the only other entire geometrical work of Euclid, that has come down to the present times, is his Data. This is the first in order of the books written by the ancient geometers to facilitate the method of resolution or analysis. In general, a thing is said to be given, which is actually exhibited, or can be found; and the propositions in the book of Euclid's Data show what things can be found from those which by hypothesis are already known.

In the order of time, Archimedes is the next of the ancient geometers that has drawn the attention of the moderns. He was born at Syracuse, about the year 287 A. C. He cultivated all the parts of mathematics, and in particular geometry. The most difficult part of the science is that which relates to the areas of curve lines, and to curve surfaces. Archimedes applied his fine genius to the subject, and he laid the foundation of all the subsequent discoveries relating to it. His writings on geometry are numerous. We have, in the first place, two books on the sphere and cylinder; these contain the beautiful discovery, that the sphere is two-thirds of the circumscribing cylinder, whether we compare their surfaces or their solidities, observing that the two ends of the cylinder are considered as forming a part of its surface. He likewise shows that the curve surface of any segment of the cylinder, between two planes perpendicular to its axis, is equal to the curve surface of the corresponding segment of the sphere. Archimedes was so much pleased with these discoveries, that he requested after his death that his tomb might be inscribed with a sphere and cylinder.

Eratosthenes was another great geometrician, and flourished in the Alexandrian school, about the time of Archimedes. He was born 276 A. C. and as a geometer, ranks with Aristæus, Euclid, and Apollonius.

About the time that Archimedes finished his career, another great geometrician appeared; named Apollonius of Perga, born 240 A. C. He flourished principally under Ptolemy Philopater, or towards the end of that century. He studied in the Alexandrian school under the successors of Euclid; and so highly esteemed were his discoveries, that he acquired the name of the *Great Geometer*.

The names of several other great mathematicians of antiquity, contemporary with Archimedes and Apollonius, have come down to us; but they are more referrible to a distinct work on geometry alone, which is of too much importance to be condensed into a single article of a work like this. We must therefore refer our readers who would inform themselves properly on this important guide to all excellence in art or science to the following works.

On the history of geometry to MONTUCLA, *Histoire de Mathématiques*, second edition. BOSSUT'S *General history of Mathematics*, of which there is a good English translation. DR. HUTTON'S *Mathematical Dictionary*, second edition, 4to. Lond. 1815. DR. BREWSTER'S *Edinburgh Encyclopædia*, to which we are much indebted in this article. The ENCYCLOPÆDIA METROPOLITANA, and similar works.

On the elements and practice of geometry; EUCLID, of which there are many editions; the first is that of Ratdolt, 1482. Dr. Barrow's edition of all the books, and the *Data*, and Dr. Horsley's of the first twelve, from the Latin versions of Commandine and Gregory, and the *Data* are among the most valuable. ARCHIMEDES; the best editions of which are Torellis in Greek and Latin, Oxford, 1792; and Peyrard's French translation, Paris, 1808. The first edition of the Greek text was that of Venatorius in 1544. APOLLONIUS, all the writings that have been recovered of this celebrated geometer, are:—1. *The Section of a Ratio;* and 2. *The Section of a space;* which were restored by Snellius, 1607; and by Dr. Halley in 1706. 3. *Determinate Section;* Snellius restored these in his *Apollonius Batavus*, 1601. There is an English translation by Lawson, to which is added a new restoration by Wales, 1772. Simson has restored this work in his *Opera reliqua*, 1776; and Giannini, an Italian geometer, in 1773. 4. *Tangencies;* Vieta restored this in his *Apollonius Gallus*, 1600. Some additions were made by Ghetaldus, and others by Alexander Anderson, in 1612. The labours of Vieta and Ghetaldus have been given in English by Lawson, 1771. 5. *The plane loci;* these have been restored

by Schooten, 1656; and Fermat, 1679; but the best restoration is that of Dr. Simson, 1749. 6. *The Inclinations;* these were restored by Ghetaldus, in his *Apollonius Redivivus*, 1607: to these there is a supplement by Anderson, 1612, a restoration by Dr. Horsley, 1770, and another by Reuben Burrow, 1779. THEODOSIUS and MENALAUS, 1558, 1675, and an Oxford edition by Hunter in 1707. PROCLUS *Commentarium in primum Euclidis Librum, libri* iv. *Latine vertit.* F. BAROCCIUS, 1560. Proclus has also been ably translated by Taylor, 1788. ERATOSTHENES's *Geometria*, &c. *cum annot*, 1672. ALBERT DURER, *Institutiones Geometricæ*, 1532. KEPLER, *Nova Steriometria*, &c. 1618. VAN CULEN, *de Circulo et adscriptis*, 1619. DES CARTES, *Géométrie*, 1637. TORICELLI, *Opera Geometrica*, 1644. OUGHTRED, *Clavis Mathematica*, 1653. *James* GREGORY, *Geometriæ Pars universalis*, 1668. BARROW, *Lectiones Opticæ et Geometricæ*, 1674, *Lectiones Mathematicæ*, 1683. *David* GREGORY, *Practical Geometry*, 1745. SHARP, *Geometry Improved*, &c. 1718. STEWART, *Propositiones Geometricæ*, 1763. *Thomas* SIMSON, *Elements of Geometry*, 1747 and 1760. *Select Exercises*, by the same, 1752. EMERSONS, *Elements of Geometry*, 1763. LACROIX, *Elémens de Géométrie descriptive*, 1795. PLAYFAIR, *Origin and Investigations of Porisms*, Edin. Trans. vol. iii. LEGENDRES, *Elémens de Géométrie*, 9th edition, 1812. LESLIE, *Elements of Geometry, Geometrical Analysis, and Plane Trigonometry*, 2nd edition, 1811.

To such as are entering on the study of geometry, the following works are particularly recommended; SIMSON's *Euclid*, PLAYFAIR's *Geometry*, LEGENDRE's *Geometrie*, which is a clear and valuable elucidation of the science, and LESLIE's *Geometry*.

GEOMETRICAL ELEVATION. *In architecture.* A design for the front or side of a building drawn according to the rules of geometry; as opposed to the *perspective* or *natural elevation*.

GERMAN SCHOOL. *In painting.* One of the grand divisions in the classification of painters, named from Germany, the country of their birth or practice. It does not offer so connected or complete a series of artists to make up the idea of a school, as does the Italian, the Roman, or the Flemish. The earlier masters were dry and hard in their manners, though some of them rose superior to their Italian cotemporaries in the splendour of their colouring. The latter masters have followed the schools of Italy and Holland, and consequently belong rather to them than to that of their native country. See SCHOOL.

GESTATIO. [Lat.] *In ancient architecture.* A place in the gardens of the ancient Romans for exercise on horseback, or in a carriage, the form of which was generally circular. The *gestatio* of Pliny (lib. ii. ep. 17.) was uncovered and near to the triclenium. It was encompassed with a box tree hedge, and where that was decayed, with rosemary; for the box in those parts which are sheltered by the buildings, preserves its verdure perfectly well; but where, by an open situation, it lies exposed to the spray of the sea, though at a great distance it entirely withers. To the inner circle of the *gestatio* is joined a shady row of young vines, with a walk, soft and pleasant even to the naked feet.

GIANT. [*gigas*, Lat. *geant*, Fr.] *In painting and sculpture.* A man of size above the ordinary rate of men; a man unnaturally large. The belief in the existence of giants was very prevalent among the ancients, and mixes itself with their history as well as with their mythology and poetry. Thus the Greeks assume that the walls of Sicyone was built by the Cyclops, who were giants, and were also employed by Vulcan in the forges of Ætna. The *giants* of antiquity were fabled to be the sons of Titan and the Earth, and made war against Jupiter, for which rebellious act they were cast down, after their defeat, to Tartarus to receive the punishment due to their enormous crimes. The poets, in speaking of these monsters, say, they had snakes instead of legs, which is represented on a gem in the Florentine collection, as terminating at the thighs into two vast serpents. See COLOSSUS.

GIGANTIC. [*gigantes*, Lat.] *In all the arts.* Suitable to a giant; big, colossal, enormous. See COLOSSAL, COLOSSUS.

GIGANTOMACHIA. [from *gigantes*, and *μάχαι*, Gr.] *In painting and sculpture.* Representations of combats with, or between giants.

GILDING. [gilðan, Sax.] *In the practice of the arts.* The art of laying gold on any surface or body by way of ornament. The art of gilding is of great antiquity. In the earliest of the Egyptian monuments of art, which have reached our times, many traces of gilding and silvering are to be found. The ancient Persians also practised this art, of which many vestiges are to be found in the ruins of Persepolis.

The Greeks and Romans also practised it to a very great extent, the former, even gilding the horns and hoofs of the victims

which they used in their sacrifices. The custom of gilding statues belongs to the infancy of art, yet it was carried into the times, when the arts had reached a high degree of perfection. The Romans used gilding to their furniture, domestic utensils, ornaments, and toys to a prodigal extent.

Although the ancients were acquainted with the art of gilding, they did not possess the means of extending the leaves of gold to such a surprising degree as is done at present. From the information of Pliny we learn, that their thickest leaves of gold were called *bracteæ Prenestinæ*, because a statue of Fortune at Prenestina was gilded therewith. The proportions of these were, an ounce of gold formed seven hundred and fifty of these leaves, each being four fingers or three inches square; which is nine square inches in every leaf, or nearly forty-seven square feet for the whole ounce. The Romans employed thinner leaves, which they called *bracteæ questoriæ*.

The art of gilding is performed either upon metals, or upon wood, leather, parchment, or paper; and there are three distinct methods in general practice; namely, *wash* or *water gilding*, in which the gold is spread whilst reduced to a fluid state by solution in mercury; *leaf gilding*, either burnished or in oil, is performed by cementing thin leaves of gold upon the work, either by size or by oil; *Japanner's gilding*, in which gold dust or powder is used instead of leaves.

The mechanical part of this art does not belong to a dictionary of the fine arts, but the curious reader is referred to the *Handmaid of the Arts;* LEWIS's *Commercium philosophico technicum, the Circle of Mechanical Arts*, the various Encyclopædias, &c.

GLADIATOR. [Lat. from *gladius*, a sword.] *In painting and sculpture.* A combatant or sword player in the public shows of the ancient Romans. The gladiators were for the greater part slaves, kept and instructed for the purpose, by a master whom they called *Lanista*. Their school of practice was called *Batualia*, where they learned to use their weapons, practising with a wooden sword called *Rudis;* so that *rudibus batuere* is to fence or exercise with this kind of instrument. The gladiators were of several sorts; some fought only with a naked sword in the right hand, and a buckler on the left; and were called *Thraces** or *Parmuliarii* from their target the *Parma*†. Others appeared in perfect armour; some went to the combat blindfold, and were called *Andabates*. Another sort were named *Retiarii*, from the net or *tunicati retiarii* vel *Laquearii*, which they used to entrap their adversaries. See AMPHITHEATRE, CIRCUS.

At first the gladiators were slaves or criminals, condemned *ad ludum*, or *ad gladium*, or prisoners taken in warfare, who had this wretched chance of saving their lives, after contributing a certain number of times to the sports of their bloodthirsty masters. The *Secutores*, so called from their succeeding or following the slain as they were killed off, were armed with a helmet, a buckler, and a sword, or a club loaded with lead. The *Thraces*, like the people of that name, were armed with a short sword, a poignard, and a small round shield. The arms of the *Myrmillones* were a shield, a scythe, and a helmet, on which was the representation of a fish. The Romans having given the appellation of *Gauls* to them; from which circumstance they cried out, "Non te peto, piscem peto: quid me fugis, Galle;" it is not thee, that I seek, but thy fish, why dost thou fly me Gaul. Another sort were called at first *Samnites*, and afterwards *Hoplomachi*, from ὁπλόμαχος, combatting, armed from head to foot. Some authors give them a shield of chased silver, a baldrick, a boot on the left leg, and a helmet with aigrettes. The *essedarii*, as their name imports, fought in chariots called *esseda*, the *andebates* on horseback with their eyes blindfolded, the *dimacharii* with a short sword in each hand. There were also other kind of gladiators, but they are principally small variations upon the before mentioned, or named from their modes of fighting.

GLASS. [glær, SAX.] *In painting and architecture.* An artificial transparent substance, made by fusing various salts, and metallic oxydes, with siliceous earths, much used for plain and decorated windows. The manufacture of glass is of very ancient date, for it was known in the time of Aristotle, who flourished three centuries and a half before the Christian æra, and who gives two problems upon glass; of which the first is, why is it transparent? the second, why is it not malleable? Theophrastus, who flourished about three hundred years before the Christian æra, describes glass as having been made of the sand of the river Belus; and the sphere of Archimedes is a remarkable instance of the perfection to which the art of glass making had been brought at that early period. Virgil, in his fifth Eneid,

* "Thraces gladiatores à similitudine parmularum Thracicarum." FEST.

† "Parma est scutum breve." NON.

compares the clearness of the water of the Fucine lake to glass; and Horace, in the third book of his Odes, mentions glass in such terms, as show that its transparency was brought to great perfection. In the time of Strabo, who lived in the first century of the Christian era, the manufacture of glass was well understood, and had become a considerable article of trade. Seneca, who lived in the same century, seems not only to have been well acquainted with glass as a transparent substance, but also understood its magnifying powers, when formed into a convex shape. Pliny relates the origin or discovery of glass (lib. xxxvi. cap. 65) as arising from the circumstance of a merchant vessel, laden with nitre or fossil alkali, having been driven ashore on the coast of Palestine, near the river Belus, the crew went in search of provisions, and accidentally supported the kettles on which they dressed them upon pieces of fossil alkali. The river sands, above which this operation was performed, was vitrified by its union with the alkali, and thus produced glass. The important hint which was thus accidentally obtained was soon adopted, and the art of making glass was gradually improved.

In the time of Pliny, glass was manufactured out of the fine sand which was collected at the mouth of the river Vulturnus. After being ground to powder, it was mixed with three parts of nitrous fossil alkali or soda, and after fusion it was taken to another furnace, where it was formed into a mass called *ammonitrum*, and converted into pure glass. A similar method of making glass was used in Spain and Gaul.

To descend to modern times, Venerable Bede informs us that artificers skilled in making glass were brought into England in the year 674. Glass windows did not begin to be generally used in England before the year 1180, and for a considerable time they were reckoned a complete luxury, and as marks of great magnificence. Italy had them first, France next, and thence they were introduced into England. Venice for many years excelled all Europe in the fineness of its glasses; and in the thirteenth century the Venetians were the only people who had the secret of making crystal looking glasses, which they performed by blowing nearly in the same manner as a considerable quantity of the common mirror-glass is now manufactured.

The art of making coloured glass appears to have been coeval with the invention. Pliny relates that the finest glass was brought from Alexandria at an immense price, and De Pauw that the glass manufactories of Diospolis the Great, the capital of the Thebaid, was of high celebrity, particularly in the manufacture of various sorts of coloured glass, and of a sort which they enriched with gilding. Many of the Egyptian mummies, some of which are in the British Museum, are ornamented with beads of variously coloured glass, which could not have been executed without a chymical knowledge of the properties of the metallic oxydes. Strabo was told by the workmen of Alexandria, that their country produced an ingredient for making coloured glass; and Seneca informs us, that Democritus introduced into Europe the art of making coloured glass, and of thus imitating the precious stones. This beautiful and curious art was brought to a high degree of perfection among the Greeks and Romans, and many of the gems were so admirably counterfeited as to deceive even those who were acquainted with the study of minerals.

In the time of Augustus the Roman architects made use of glass in their musaic decorations; and several specimens of this work have been found among the ruins of the villa of the Emperor Tiberius, in the island of Capri. Some of these specimens have been examined and analysed by Klaproth. They consist of pieces of red, green, and blue glass. Another mode of forming pictures with coloured glass was known and practised by the ancients. It consists of variously coloured glass fibres, fitted with the utmost exactness, so that a section across the fibres represents the objects to be painted. These fibres, when properly joined together, are afterwards cemented by fusion into a homogeneous and solid mass. Specimens of this singular art were found about the middle of the last century. Count Caylus describes them in his *Collection of Antiquities*, and Winckelmann in his *Annotations on the history of the art among the ancients*, under the name of pictures made of glass tubes.

About the end of the third century, as appears from a passage in Lanctantius (*de opificio dei*, cap. 5), glass was used for windows; and there is reason to believe, from the glass plates found in Herculaneum, that window glass had been introduced at a much earlier period. St. Jerome, A. D. 422, Paulus Silentiarus, A. D. 534, Gregory of Tours, A. D. 571, and Johannes Philoponus, A. D. 630, all speak in the most distinct manner of the use of glass in the formation of windows.

The following manner of staining glass for the painter's art, by Mr. Robert Wynn,

who received an honourable reward from the Society for the Encouragement of Arts, &c. has been recommended to the author of this Dictionary by competent judges; and on such recommendation he printed it, a few years since, in the third volume of his Annals of the Fine Arts. p. 358.

In *coloured glass* the whole body of the material is tinged throughout by means of some colouring ingredient uniformly diffused through or dissolved in the substance of the glass.

In *enamelling*, the colours being ground up with an easily vitrifiable flux, are laid on the surface of metal, or porcelain, or glass, and are then exposed to such a degree of heat as shall just melt the enamel, and then fix it on the surface of the substance on which it has been applied.

In *staining glass*, the colouring ingredients are mixed with water, or some other fluid vehicle, by means of which they are spread over the surface of a plate of glass, and when dry, are exposed to such a degree of heat as by experience has been found to be sufficient. The colour is then rubbed off from the surface of the glass, to which it does not adhere, and those parts of the plate which have been thus covered are found to have acquired a permanent and transparent tinge or stain, doubtless from some particles of the colour having been absorbed and fixed in the pores of the glass.

In all the compositions for staining glass, silver in some form or other enters as an essential ingredient; I shall therefore begin by describing the different preparations of silver that I make use of.

Take two or three ounces of pure nitric acid, and dilute it with three times its bulk of distilled water; put it into a Florence flask, or any other convenient glass vessel, and add to it refined silver by small pieces at a time till the acid, though kept at a warm temperature, refuses to dissolve any more: after standing quiet for some hours, pour off the clear liquor into a clean ground stoppered phial, and label it nitrate of silver.

Preparations of Silver.

No. 1. Dissolve common salts in water, and add nitrate of silver, drop by drop, till it ceases to occasion any precipitate; there will thus be obtained a heavy white curd-like substance, which must be well washed in hot water, and dried; by exposure to light it becomes of a dull purple colour. It is known by the name of muriate of silver, or *luna cornea*.

No. 2. Dissolve carbonate of soda in water; and add nitrate of silver as above described. The white precipitate thus obtained, when washed and dried, is ready for use. It is called carbonate of silver.

No. 3. Dissolve sub-carbonate of potash in water, and proceed precisely as directed for No. 2. The white powder thus obtained is also carbonate of silver.

No. 4. Dissolve phosphate of soda in water, and proceed as already mentioned. The precipitate thus obtained is of a yellow colour, and is called phosphate of silver.

No. 5. Take any quantity of pure silver rolled out into thin plates, and put it into a crucible, together with some sulphur. When the crucible has been a short time on the fire, the sulphur will first melt, and then will gradually melt away with a blue flame. When the flame has ceased, add some more sulphur, and proceed as before; then take the silver out and heat it red in a muffle; it will now be white and very brittle, and, after having been reduced to powder in a mortar, is fit for use.

No. 6. Take any quantity of a dilute solution of nitrate of silver, and put into it a stick of metallic tin, warm it a little, and the silver will be precipitated in the form of metallic leaves on the surface of the tin. Scrape it off, wash it in warm water, dry it, and grind it in a mortar.

No. 7. Take any quantity of nitrate of silver, and put into it a piece of copper-plate; then proceed precisely as in No. 6.

The foregoing preparations of silver mixed with other ingredients, in the proportions about to be described, compose all the varieties of pigment that are requisite for staining glass.

Yellow.

Take silver, No. 2, one part; yellow lake, one part. Mix the ingredients, and grind them well with oil of turpentine, mixed with the thick oil of turpentine; lay it on thin.

Take silver, No. 1, one part; white clay precipitated from a solution of alum by sub-carbonate of soda, three parts; oxalate iron, prepared by precipitating a clear solution of sulphate of iron by oxalate of potash, three parts; oxide of zinc, two parts. Let the silver be ground first in water with the oxyde of zinc, and then with the other ingredients. This is intended for floating on thick.

Take silver, No. 3, one part; yellow lake, one part. Grind them in spirit of turpentine and oil, and lay the mixture on very thin.

Take silver, No. 4, one part; yellow

clay, one part; white clay, half a part, Grind them in spirit of turpentine and oil, and lay the mixture on thin.

Orange.

Take silver, No. 6, one part; Venetian red and yellow ochre, equal parts, washed in water and calcined red, two parts. Grind the ingredients in spirit of turpentine, with thick oil of turpentine, and lay the mixture on thin.

Take silver, No. 7, one part; Venetian red and yellow ochre, one part. Grind in turpentine and oil, &c. as the foregoing. If entire panes of glass are to be tinged orange, the proportion of ochre may be greatly increased. The depth of the tinge depends in some measure on the heat of the furnace, and on the time that the glass is exposed to it, which, though easily learned by experience, cannot be made the object of precise rules.

Red.

Take silver, No. 5, one part; brown oxyde of iron, prepared by heating scales of iron, then quenching them in water, reducing them to a fine powder, and lastly calcining it in a muffle, one part. Grind the ingredients with turpentine and oil, and lay the mixture on thick.

Take of antimonial silver, prepared by melting together one part of silver and two parts of crude antimony, and pulverizing the mass, one part; colcothar, one part. Grind the ingredients in turpentine and oil, and lay the mixture on thick.

Take antimonial silver, prepared as above, one part; Venetian red and yellow ochre, of each one part. Grind, &c. as before mentioned.

When whole panes are to be tinged, the proportions of ochre or of colcothar may be much increased, and the ingredients should be ground in water.

Of laying on the colour.

The method practised by most stainers of glass is to draw the outline in Indian ink, or in a brown colour ground with turpentine and oil, and then to float on the colour thick, having previously ground it with water. But in this way of proceeding it is very subject either to flow over or to come short of the outline, and thus render the skill of the draughtsman of little effect.

My method is to draw the pattern in Indian ink, and having ground the colour as fine as possible in spirits of turpentine, brought to a proper consistence with thick oil of turpentine, to add a little oil of spike lavender, and to cover the outline entirely with this composition.

When it has become dry, I work out the colour with the point of a stick and a knife from those parts that are not intended to be stained, and am thus enabled to execute the most delicate ornaments with exactness and precision.

If the colour is required to be laid on so thick that the outline would not be visible through it, let the colour be first laid on as smoothly as possible, and when it has become dry, draw the outline upon it with vermilion water colour, and work out the design as before.

Besides the precision acquired by the above method, it enables the artist to apply different shades in the same design; whereas the old method of floating only communicates a uniform tint to the whole pattern.

The artist should contrive to charge his furnace with pieces the colour of which is ground in the same vehicle, and not to mix in the same burning some colours ground in turpentine and others ground in water. The pieces must also be very carefully dried, and must be placed in the furnace when the latter is moderately warm.

To Gild Glass.

Take of fine gold in grains, one part; of pure mercury, eight parts. Warm the mercury and then add the gold, previously making it red hot. When the gold is perfectly dissolved, pour out the mixture into cold water, and wash it well. Then press out the superfluous mercury through linen or soft leather, and the mercury which runs through (as it retains some gold) should be reserved for the next opportunity.

The amalgam which remains in the leather is to be digested in warm aquafortis, which will take up the mercury, but will leave the gold in the form of an extremely fine powder. This powder, when washed and dried, must be rubbed up with one-third of its weight of mercury; then mix one grain of this amalgam with three grains of gold flux, which is to be applied in the usual manner.

The mechanical art of manufacturing plain and coloured glass belongs to distinct treatises or general Cyclopædias, to which, with MARTIN's *Circle of the Mechanical Arts*, we refer our readers.

GLAZING. [from glass, accidentally varied.] *In painting.* The art of overlaying or finishing pictures in oil colours, with brilliant and pellucid colours. It is called glazing from its transparency, and from

its giving a tone and harmony to the tints resembling the effects of glass. The manner of glazing an oil picture is by laying on a thin coat of transparent colour lightly, through which all the lights and shades of the under colouring is perceptible. However beautiful for a time glazing may render a picture, it is inevitably destructive to it after a time, as the glazing forms a disagreeable and opake coat, like yellow varnish, over the whole surface of the picture, which cracks and destroys its effect; and if any pencilling or finishing has been affected by this manner, it is sure to be the first destroyed in the cleaning. The manner of colouring adopted by Rubens and his school produces all the brilliancy, depth, and effect of this and other meretricious modes of practice. This effective mode of colouring is thus related in that great master's Lessons on Painting. "Begin by painting in your shadows lightly, taking particular care that no white is suffered to glide into them, it is the poison of a picture, except in the lights; if once your shadows are corrupted by the introduction of the baneful colour, your tones will no longer be warm and transparent, but heavy and leady. It is not the same in the lights, they may be loaded with colour as much as you may think proper, provided the tones are kept pure; you are sure to succeed in placing each tint in its place, and afterwards by a light blending with the brush or pencil, melting them into each other, without tormenting them, and, on this preparation, may be given those decided touches which are always the distinguishing marks of the great master."

Glory. [*gloria*, Lat.] *In painting and sometimes in a bad style of sculpture.* A circle of rays which surrounds the heads of saints, &c. in pictures; introduced by indifferent painters, who, to distinguish sanctity and divinity, which they failed in through expression, added the glory; like one who, not knowing how to represent a lion, painted a goat, and added, "this is a lion." Sculptors have also with a similar bad taste, like Bernini's altar in the tribuna of St. Peter at Rome, made marble clouds, bronze skies, and gilded brazen rays and sun beams large enough for the main beams of the cupola itself.

Glove. [glope, Sax.] *In costume.* Clothing for the hands. Gloves were known to the ancients, and were called *chirotheca* and *manicæ* by the Romans, and Χειροθήκη by the Greeks, literally hand coverers.

Glyph. [Γλυφίς, Gr.] *In architecture.* A notch or incision cut in by way of ornament. See Diglyph, Triglyph.

Glyptick. [from Γλύφω, I engrave or sculp.] *In sculpture.* The art of engraving figures, &c. on stones and other hard substances. See Gem.

Glyptography. [from glyptick.] *In the criticism of art.* The knowledge of engraved gems. A great number of works have been published on this branch of knowledge, but very few of them being elementary, their names will be sufficient for reference. M. Vettori is the first who wrote on glyptography. Marietti has also published a work on the same subject, which is very voluminous and scarce. Busching, Aldini, Gurlitt, and Millin have each wrote concise elementary works, well adapted for students. Ernesti, Martini, Siebenkees, Christ, and Eschenburg have devoted a portion of their works on Archaiology to the consideration of Glyptography; and much information may be gained on the same subject from the works of the elder Pliny, Count Caylus, M. Bruckmann, Spence, in his Polymetes, M. de Veltheim, Kirchman, Klotz, Winckelmann, and other eminent writers on archaiology and the art. See Abraxas, Dactyliotheca, Gem sculpture.

Gobelins. See Tapestry.

Godroon, corruptly Gadroon. [*godron*, Fr.] *In architectural sculpture.* A kind of inverted fluting, beading, or cabling, with which various members and ornaments are decorated.

Gola or Gula. [Lat.] *In architecture.* A moulding so called from its resemblance to the contour of the throat, from the Italian, and French geule, gola and doucine, but is more usually called *cyma reversa*, or ogee. See Cymatium.

Gorgon. See Medusa.

Gorgoneia. [Γοργόνεια, Gr.] *In architectural sculpture.* Masks carved in imitation of the Gorgon's or Medusa's head, used as keystones.

Gothic. [from Goth.] *In architecture.* A style of building named after the Goths, its supposed inventors, but called also the Pointed, the English, and sometimes the German style of architecture. It may be divided into the Saxon or early *British*, the Norman or *English*, and the Florid. Various hypotheses have been formed upon the origin of this beautiful and original style of architecture, which have been thus summed up by Dr. George Moller, first architect to the Grand Duke of Hesse, &c. in his learned *Essay on the Origin and Progress of Gothic Architecture, traced in and deduced from the ancient edifices of Germany, with reference to those of England, &c.*

a translation of which has just (1824) been published, namely,

1. From the holy groves or thickets of the ancient Celtic nations.

2. From huts made with the entwined twigs of trees.

3. From the structure of the framing in wooden buildings.

4. From the pyramids of Egypt.

5. From the imitation of pointed arches generated by the intersection of semicircles.

See ARCHITECTURE, ARTS, STYLE, SCHOOL; and for the best books and principal artists in this style see ARCHITECTURE.

GRACE. [Fr.] *In all the arts.* 1. Adventitious or artificial beauty; embellishment, highest perfection. 2. Also a goddess supposed by the heathens to bestow beauty. 3. In the plural *graces* [*gratiæ*, Lat.] Three heathen goddesses or nymphs renowned for their beauty.

1. GRACE, or the highest, and perhaps indescribable perfection of beauty, consists of a certain arrangement of the component parts of a figure or composition, from which results a pleasing, or, as it is called, a graceful effect. This quality depends much upon the contrast and lightness of the position and action of the figures. The figure of St. Paul in Raffaelle's cartoon of the Sacrifice of Lystra is an eminent example of this fine quality. Indeed, all the pictures of this great master, particularly his inimitable cartoons, abound with grace, and are splendid models of imitation. The most so, however, are the St. John healing the lame man, and several others in the cartoon of the beautiful gate. The statue of the Venus de Medici and of the sleeping hermaphrodite also abound with this beautiful quality.

2. The GRACES are represented by the ancient artists and poets like three beautiful sisters, naked, unconscious of shame, and linked together. The Graces and Nymphs are represented by Horace (l. i. od. 4. v. 7) as dancing with Venus at their head. Canova's Graces, in the Duke of Bedford's fine gallery of sculptures at Woburn Abbey, are eminently beautiful and replete with grace.

GRADATION. [Fr.] *In painting.* That regular progress from one degree of colour or shade to another that gives effect, rotundity, and verisimilitude to painting. It can only be obtained by an attentive study of nature, particularly in her effects of light and shade. See CHIAROSCURO.

GRAND. [*grandis*, Lat.] *In all the arts.* Great, noble, sublime, lofty; conceived or expressed with great dignity. As Raffaelle, Coreggio, and Guido excelled in grace, so does Michel Angiolo in this majestic quality of the art. His style is peculiarly and essentially grand. The Greek style of architecture is also grand; the Roman rich and sometimes beautiful. The Greeks also gave this sublime quality as well as every other requisite characteristic to their sculpture. It is an emanation of the mind, which must be tuned by nature to its essence, and, like poetry, is born with the artist. A cultivated mind, a study of the greatest masters, and a close investigation of those qualities which impress grandeur upon people and things, must be sought for by him who would excel in grandeur of style. See STYLE.

GRANITE. [Fr. from *granum*, Lat.] *In practical architecture.* A hard compact stone much used in building, composed of separate and very large concretions rudely compacted. The white granite with black spots, sometimes called moorstone, which is now much used in the pavement of London, is a very firm, and though rude, yet beautifully variegated mass. Hard red granite, variegated with black and white, called oriental granite, is valuable for its extreme hardness and beauty, and its capability of receiving a most elegant polish. The Aberdeen, Cornish, and Irish granites are peculiarly fine. See any good treatise on MINERALOGY for further particulars.

GRECIAN. [from Greece.] *In the history of the arts.* Appertaining to the people or country of Greece. See ARTS, ARCHITECTURE, GREECE, SCHOOL, SCULPTURE, STYLE.

GREECE. [*Græcia*, Lat.] *In the history of the arts.* The most celebrated country of antiquity, inhabited by the Greeks. It is of very inconsiderable extent, and scarcely equals in size the half of England. It is comprehended between 36° and 41° of north latitude; and is bounded on all sides by the sea, except on the north, where it borders upon Epirus and Macedonia. Thessaly, its most northern province, is an extensive and fertile vale completely surrounded by lofty mountains; by Olympus on the north; by Ossa on the east; by Pindus on the west; and on the south by Oeta, at the foot of which lies the famous pass of Thermopylæ. The tract extending from the borders of Thessaly and Epirus to the Corinthian isthmus contains the provinces of Acarnania, on the east frontier of which runs the river Achelous; Ætolia, bounded on the south by the sea, but defended on every other side by mountains almost impassable; Doris, wholly a mountainous country; Locris and Phocis, both of small extent, but full of fertile

plains; Bœotia, a well watered vale, bounded, except on the north-east, by the mountains Parnassus, Helicon, Cithæron, and Parnes; and Attica, a rocky and barren country, producing little grain or pasture, but yielding a variety of fruits, particularly figs and olives. The isthmus of Corinth, a mountainous ridge, at one place only five miles in breadth, leads farther south to the peninsula of Peloponnesus, which contains Achaia, a narrow strip of country on the northern coast, bounded on its inland frontier by a ridge of mountains, running along its whole extent from Corinth to Dyme; Argolis, a remarkably fruitful valley, included between two mountainous branches, stretching from Cyllene, the most northern of the Arcadian summits, and terminating, the one in the gulf of Argos, and the other at the promontory of Scylla; Elis, or Eleia, watered by the rivers Peneus and Alpheus, and less mountainous than the other provinces in Peloponnesus; Arcadia, the central state, consisting of a cluster of lofty mountains, the principal of which are Taygetes and Zarex; Messenia, the most level district in the peninsula, the best adapted for tillage, and most fruitful in general produce; and Laconia, traversed by two branches of the Taygetus and Zarex, between which runs the river Eurotas, watering several very fertile but not extensive vales.

The general aspect of Greece is rugged, but its climate is highly propitious; and both the summer heat and winter cold are preserved by the surrounding seas in an equable state of temperature. Some of its mountains contain valuable metals; other are composed of the finest marbles; and many are covered to a great extent with a variety of useful timber. Its central plains produce corn, oil, and wine; its valleys afford the richest pasturage; and its long winding coast abounds with excellent harbours. The great variety in its surface gives occasion to considerable diversity, both of produce and of climate, in every season of the year. It has been remarked, as a peculiar feature in the topography of the most ancient cities of Greece, that every metropolis possessed its citadel and its plains; the former as a place of refuge in war, and the latter as a source of agriculture in peace. The most remarkable of its towns were, in THESSALY, Gomphi, Metropolis, and Scotussa, north of the river Peneus; Atrax, Larissa, the city of Achilles; Magnesia, and Apheta, the port of the Argonauts; Heraclea, named from Hercules, who is said to have thrown himself into the pile on the summit of Oeta, in its vicinity; Lamea and Hypata, on the banks of the Spercheus; Thaumaci, Halos, and Pthia, the country of the Myrmidones, Demetrias, Pheræ, Pharsalia, on the banks of the river Enipeus. In ACARNANIA, Amphilochicum, Stratus, and Actium, at the bottom of the Ambracian gulf. In ÆTOLIA, Chalydon, Chalcis, on the river Evenus; Thermæ, Lysmachia, Canope, Naupactus, Erythræ, and Antirrhium. In DORIS, Cytinium, and three smaller towns of little note. In LOCRIS, Amphissa, Opus, Cnemis, Narix, the native country of Ajax, Thronium, Nicæa. In PHOCIS, Delphi, accounted the centre of Greece, Elatea, on the river Cephissus, Crissa, and Anticyra. In BŒOTIA, Thebes, near the river Asopus, Platæa, Leuctra, Orchomenos, Haliartus, Coronea, Cheronea, Lebadia, Thespiæ, Ascra, the birthplace of Hesiod, Aulis, Detium, and Tanagra. In ATTICA, Athens, with its harbour, Piræeus, Phalereus and, Munichia, Marathon, Phylæ, and Decelia. In MEGARIS, Megara, Eleusis, and Nycæa. In ACHAIA, Corinth, Sicyon, Patræ, Ægium, Dyme, and Pallene. In ARGOLIS, Argos, on the river Inachus, Mycenæ, the city of Agamemnon, Epidaurus, Nemea, and Tiryus. In ELIS, Elis, on the river Penens, Olympia, and Pisa. In ARCADIA, Megolopolis, Tegea, Mantinea, and Pallantium. In MESSENIA, Messene, Stenyclarus, and Pylos, the city of Nestor. In LACONIA, Sparta, on the river Eurotas, Gythium, Silesia, Helos, Amyclæ.

GREEK. See GRECIAN and its references.

GREENHOUSE. [*green* and *house*.] *In architecture.* An ornamental building in which tender plants are sheltered. See CONSERVATORY.

GRIFFIN. [Γρύψ, Gr.] *In the mythology of the arts.* A fabulous animal, said to be generated between the lion and the eagle, and to have the head and paws of the lion, the ears of the horse, the wings of the eagle, and a crest formed like the dorsal fins of a fish. According to Ælian, in his fourth book of his History of Animals, this creature derived its origin from India; its back was covered with black feathers, its breast with red, and its wings white. Ctesias, Herodotus, and other credulous writers also give similar descriptions of the griffin. According to a tradition of the Bactrians, the gold mines of the country were guarded by griffins. The griffin is also one of the attributes of Apollo; and, according to Philostratus, in his Life of Apollonius, the Indians figured the sun in a quadriga drawn by griffins. Representations of griffins are to be found on

many antique bassi rilievi, and in BUONAROTTI, *Medaglioni antichi.*

GRIMACE. [Fr.] *In painting and sculpture.* A representation of a distortion of the countenance from habit, affectation, or insolence.

GROIN. *In architecture.* A species of arch, formed by one vault, or continued arch intersecting another. See ARCH, CUPOLA, DOME.

GROTESQUE. [Fr.] *In all the arts.* Distorted of figure, unnatural.

GROTTESQUE. [from *grotto.*] *In architecture and sculpture.* Artificial work formed in imitation of grottoes or grotto work.

GROTTO. [*grotte*, Fr.] *In architecture.* An artificial cavern or cave, decorated with rock work, shells, &c. constructed for coolness.

GROUND. [grund, Sax.] *In all the arts.* The first stratum of paint upon which the figures, &c. are afterwards painted. The fundamental substance; that by which the additional or accidental parts are supported. The back of a basso rilievo. The face of the country or scenery that fills up round and behind a building. The study of backgrounds is one of the most essential branches of the art. So much so, that when a great painter was offered a youth as a pupil, whom he was told could paint well enough to put in his backgrounds, replied, then he requires no instruction. An observation of nature, studying what colours and forms best set off others, is the best school for backgrounds. The student may, however, be assisted by reading the 137th chapter of LEONARDO DA VINCI's *Treatise on Painting;* the fourth and eighth chapters of the fourth book of *Le grand Livre des Peintures de* LAIRESSE; REYNOLDS's *Discourses on Painting*, &c.

GULA. See GOLA.

GUTTÆ. [Lat.] *In architecture.* Drops, ornaments used in the Doric frieze and mutules. See DROPS, MUTULES.

GUTTERS. [*guttur*, Lat.] *In practical architecture.* A passage or channel for water on the roofs and other parts of houses.

GUTTUS or GUTTURNIUM. [Lat.] *In ancient sculpture.* A species of small vase with one handle, used by the Romans, according to Pliny, in their sacrifices.

GWALIOR, GUALIOR, or GUALIAR. *In the history of architecture.* The name of a strong fortress of Hindostan, in the district of Gohud, and province of Agra. This fort stands on a hill about one and six tenths of a mile long, three hundred yards wide at its greatest breadth, and three hundred and forty-two feet high at its north end. The sides of this hill are nearly perpendicular, and a stone parapet is carried all the way round close to the brow of it. At the north end of the hill, and near the middle of the fort, are two remarkable pyramidal buildings of red stone, in the ancient Hindoo style of architecture. The only gate to this fort is at the northern extremity of the east side, from which there is an ascent to the top of the rock by several flights of steps. The garrison is supplied with excellent water, from several natural cavities in the rock; and about half way up the rock, on the outside, there are many artificial excavations, containing the figures of men and animals carved out of the solid rock.

The town is situated on the east side of the hill. It is large and populous, and contains many good stone houses. The stone is obtained from the neighbouring hills, which surround the fort like an amphitheatre, at the distance of from one to four miles. They chiefly consist of schisthus, with apparently a large portion of iron, and their surface is rugged, and nearly destitute of vegetation. The small river Soonrica rises to the eastward of the town, and beyond it is the tomb of Mahommed Ghous, a learned man; it is a handsome stone building, with a cupola covered with blue enamel. Within the enclosure of this monument is another tomb erected to the memory of Tan-Sein, a great musician. The leaves of the tree which overshadows this tomb are supposed by the vulgar to give great melody to the voice when chewed. About seven hundred yards from the northern extremity of the fort is a conical hill, having on its summit two high pillars joined by an arch, which is supposed to be of very ancient workmanship. See ARCHITECTURE *Indian.*

GYMNASIUM. [Lat. Γυμνάσιον, Gr.] *In architecture.* A place or building where wrestlers or other persons exercised their strength in bodily exercises, and feats of activity. Among the Greeks the gymnasii occupied a primary station in their public buildings, which were more commonly termed palæstræ (πάλαιστρα). See CIRCUS, HIPPODROME, PALÆSTRÆ.

GYMNASIA. [from *gymnasium.*] *In ancient costume.* The chief director of the games and sports of the gymnasii.

GYNÆCEIUM. [Lat. Γυναικεῖος.] *In ancient architecture.* An apartment or building appropriated to the use and service of the women. A sort of seraglio.

GYPSUM. [Lat. Γύψος.] *In sculpture.* A hard, compact, whitish stone, which, when burnt, forms plaster of Paris. The finer sorts are used to make vases, statues, &c. See ALABASTER.

H

HABIT. [*habitus*, Lat.] *In painting and sculpture.* Dress, accoutrements. See COSTUME.

HADRIANEIUM. [from *Hadrian.*] *In architecture.* The once splendid tomb of the Emperor Hadrian, on the banks of the Tiber at Rome, now the castle of St. Angelo. The lower part of this edifice is a large square of about one hundred and forty ells on a side. The upper part is a complete circle, and surrounded by colonnades and statues, as it is represented in the engravings made after the designs of G. Paolo Panini. Twenty-four columns of Pavonazzo marble, now forming a portion of the basilica of St. Paul without the walls, are said to have been taken from the Hadrianeium by the pious class of Christian spoliators, and it is believed that the greater part of the statues were thrown into the Tiber by the Goths, on their first taking possession of it as a fortress. The massive strength of its walls, together with its commanding situation, rendered it an early object of military attention; and Belisarius was the first to avail himself of the advantages it offered. It is now the principal fortress in Rome, HADRIAN'S VILLA. See VILLA.

HAERLEM or HAARLEM. *In the history of the arts.* A town in the United Provinces, twelve miles west of Amsterdam, and fifteen miles and a half north of Leyden, is a place of considerable antiquity, which has experienced many vicissitudes in its history.

Haerlem is a large and handsome town, well built, and well paved. Its streets are broad and regular, and, like the other towns of Holland, it abounds in canals, bridges, and trees. The buildings most worthy of notice are the palace, the public library, and the church. The last is a very large structure, crowded, as is common in that country, with square wooden monuments, without any name, but having the arms of the deceased painted on a black ground, and the date of the death in gold letters. Its principal ornament is the organ, which is accounted the finest in the world, and which occupies the whole west end of the nave. It is supported by eight marble columns, between two of which, in the centre, is a noble emblematical alto rilievo, with figures as large as life. It was built in 1738, and has eight thousand pipes, the largest of which is thirty-two feet in length, and sixteen inches in diameter. Haerlem is still more justly celebrated as the birthplace of Lawrence Costar, who is said to have invented the art of printing, and the site of whose house is still pointed out to strangers by an inscription. He is said to have made the discovery by cutting the initial letters of his name upon a piece of bark, and using it as a seal; and specimens of the infancy of the art are preserved in the town house. An academy of sciences was founded in 1752; and there is an elegant museum of natural history formed by Dr. Van Marun, superior to any other cabinet in Holland. The articles are in an excellent state of preservation, and arranged with scientific taste. The Stadthouse is a magnificent building at one end of the market place, and contains a number of valuable paintings, among which is the first piece in oil, by Eyert, in 1437, which was sold during the siege in 1572 for a few stivers, and is now valued at £2000.

HAGUE. *In the history of the arts.* A town in Holland, and the seat of the Dutch government, ten miles south-south west of Leyden, fourteen south-west of Amsterdam, and about three from the coast. The streets are generally spacious, and the meanest of them extremely clean. They are decorated with trees, canals, and tasteful bridges. They are paved with a kind of light coloured bricks, which have a gay appearance, and which are so closely joined together, that no interstices can be perceived to harbour any species of dirt. The Voorhout, which is accounted the principal street, is about half a mile in length, with a mall in the middle, and contains a number of elegant buildings, in the present style of architecture. But the Vyverburg is the most beautiful part of the city, and forms an oblong square, with a line of magnificent buildings on one side, and a large body of water on the other. The palace of the Stadtholder consists chiefly of old buildings, erected at different periods, without any regularity of design, and is surrounded by a canal, with drawbridges. The French church is noted as being the burying place of several Counts of Holland, and in its vicinity is a fine garden in imitation of that of Vauxhall. The palace called Maison de Bois, a house of retirement for the Stadholder; has nothing remarkable in its ap-

pearance or situation, but residence of a plain country gentleman. During the time of the Batavian republic it was converted into a receptacle for the national cabinet of paintings; and, to the disgrace of the government, one suit of its apartments was occupied by the keeper of a tavern and brothel. The gardens belonging to this palace are kept with great care as a public promenade; but they are laid out in the worst taste. Every thing is unnatural and artificial, stagnant canals, puerile bridges, flower beds of every conceivable form, and trees cut into the most fantastic shapes. By the recent restoration of the old government, its empty palaces have been re-occupied; and its former affluence and splendour may be expected to return.

HALL. [hal, Sax.] *In architecture.* The first large room or apartment in a house; the public room of a corporate body; a court of justice; a manor house, so called because courts for the admission of tenants and other manorial business are held in them. There are also other apartments in a mansion called halls besides the hall of entrance, as the servants' hall, &c.

HAMBURGH. *In the history of the arts.* A free imperial city of the Duchy of Holstein, in Lower Saxony, and one of the largest, richest, and most populous cities in Germany. It is situated on the right or northern bank of the river Elbe, at the distance of about seventy miles from its discharge into the German Ocean. The town, although large and flourishing, is by no means elegant. The principal streets have long and broad canals, which are filled by the tide; the others, especially in the old town, are mean, narrow, and ill paved. The houses are built mostly after the Dutch fashion, and very lofty, several of them being six or seven stories high. The most beautiful parts of the town are the *Jungfernstoig*, which is the fashionable promenade, especially on Sundays, and the street and alleys along the Alster. The principal public buildings in this city are the churches of St. Peter, St. Nicholas, St. Catherine, St. James, St. Michael, St. John, and the cathedral. These are mostly Gothic structures, having lofty spires, beautiful altars, and large organs. From the spire of the church of St. Michael there is an extensive and charming view of the town and its environs. The exchange, the orphan house, the several hospitals, the room house, the house of Eimbeck, and the obelisk in honour of Professor Busch, are also worthy of notice.

HAND. [hand, Sax.] *In painting and sculpture.* The extremity of the arm, consisting of the palm and fingers, with their radial and ulnar muscles. Performance of any one. In this latter meaning artists and critics say, the *hand* of such or such an artist, for his *performance;* and a knowledge of the hand of a great master is one of the most difficult and necessary parts of the science of a connoisseur.

The hand, taken in its ordinary sense, consists of the bones and muscles of the carpus, metacarpus, and the fingers; the knowledge of which is to be obtained from works on anatomy. The hand is one of the most difficult and important of the extremities to represent well either in drawing, painting, or sculpture, and requires the greatest attention from the artist. The hands of the best masters are always well understood and delineated, and by their execution their works are often known. The characters of the hands in a work of art are as various as the persons to whom they belong; and nature must be the artist's guide in this as well as in all other of his works.

A handsome hand is reckoned a great beauty, and the ancient sculptors have succeeded in executing this difficult extremity to a wonder. Juno was called, by ancient poets, the white armed goddess, and Minerva is described as the goddess with the beautiful hands.

The hand was received by the ancients as a symbol of various denominations. Sacred hands were such as they worshiped with particular rites. Votive hands are known to the learned under various names, derived either from the material of which they were made, or from the usage to which they were applied, as *manus æneæ*, from the material (bronze) of which they were made; *manus pantheos*, when covered with symbols appertaining to all the gods. The first votive hand was published by PIGNORIUS, and is engraved in *Le Trésor des Antiquités Grecques*, vol. vii. page 510. THOMASSIN published a second from the *Barberini Museum*, in the same work, vol. x. p. 666. The third belonged to the Museum Bellori, and was explained by Michel Angiolo LA CHAUSSE, in the same work, vol. xii. p. 963, and vol. ii. pl. 2. of his *Museum Romanum.* It is also published in BEGER'S *Thesaurus Brandenburgicus*, vol. iii. p. 404, and in KIRCHER'S *Œdipus Egypt.* vol. ii. part 2, page 451. Father BONANNI engraved the fourth in his *Museum Kircherianum*, pl. 25, p. 82, which is also, with the preceding three, in MONTFAUCON, vol. ii. part. 2, page 137. GORI has published a fifth in the third vol. of his *Inscriptions antiques;* and the *Recueil*

de CAYLUS, vol. v. p. 63. Nos. 1 and 2, contains a sixth which was found in the environs of Naples.

The authors of the *Antiquités d'Herculanenum* have published in their first volume a votive hand, found in 1746, among the ruins of Resina. It is reckoned of indubitable antiquity, and of the time of Titus. It is a right hand, with two of the fingers closed. Upon some of the antique votive hands are found inscriptions concerning their dedication, as on that described by MONTFAUCON, vol. ii. part 2, page 137. No. 2, where is one inscribed "Cecropius voti compos votum solvit." For farther information the reader is referred to the beforementioned works.

HANOVER. *In the history of the arts.* A fortified town of Germany, and capital of the kingdom of the same name. It is situated in a sandy plain, on both sides of the river Leine, which divides it into two towns, viz. Old and New Hanover. The old town lies on the left bank of the river, which here forms two branches, and after enclosing an island, they again reunite and become navigable. The old and new towns are connected by bridges. The town is built in the form of a half moon, and contains several good streets. The houses of the new street called George-strass are all built on the same plan. This street, or rather row, is built along the side of a fine rampart, from which it is separated by iron chains, resting on pillars of freestone. There is a Gothic appearance in most of the buildings of Hanover. The houses resemble the galleries of a vessel of the sixteenth century, and the time of their erection is always marked upon them. In those dated 1565 each story projects several feet over the one below it, and exhibits medallions, pagan deities, warriors, and verses of the Psalms. Red and green bricks are intermixed in some of the edifices, and in others varnished tiles are arranged in rows. Sometimes bricks are only used for the doors and windows, while the rest of the house consists of wood, painted of various colours. In some houses the bricks are placed in wooden frames, and secured by plaster. The town, however, contains many handsome buildings. The elector's palace, which, after being destroyed by fire, was rebuilt in 1791, is a fine building constructed of hewn stone. This was the seat of the regency. The newly erected part of the electoral church, and the palace of the Princess of Wales, are likewise excellent buildings of stone. Hanover contains also a theatre, three parish churches, a poor house, and three hospitals. The public library of Hanover is a respectable building. The first story is appropriated to charts, state papers, and juridical records. The upper stories contain works of imagination and belles lettres. When the French threatened to invade Hanover the elector ordered the four copies of the beautiful Oxford Bible, the books, and the precious monuments, to be packed up and removed. We believe that they were afterwards sent back to the capital. This library was founded by Leibnitz, who bequeathed to it his own fine collection of books. There are two portraits of this great man in the library, one at the age of forty, and the other at sixty; and the arm chair in which he expired is there carefully preserved. His remains are interred under a stone in the Lutheran church in the new city. A very fine monument is also erected to his memory by private subscription. It is an Arian temple, situated in an umbrageous thicket, at the end of a long avenue of lindar trees. Twelve columns of the Tuscan order, of hard gray stone, quarried in the Hartz mountains, support a light cupola, beneath which is placed a white marble bust of Leibnitz, taken from the picture of him at the age of sixty. "To the memory of Leibnitz" is the simple inscription which reminds us of the labours of this great philosopher.

The cemetery of the Jews is situated on an oval eminence near the city; and that of the Lutherans is a vast field surrounded by a parapet, and crowded with funeral monuments. The tombstones of the noble families occupy a large space in the middle of the field. The graves of the lower classes are every day covered with fresh flowers. The remains of the celebrated physician Wherloff lie under a triangular pyramid. "Not far distant," says Mongourit, "is a monument representing a mother stretched upon the body of a beloved daughter; the scissars of fate cut a half-blown rose, and the parent tree, stripped of its leaves, is torn up by the root. Just by is the tomb of the lover and the young lady. The sculptor has succeeded in depicting the beauty and elegant figure of this youth. On one side of the monument we behold a superb oak; on the other, the oak is reversed, its branches are broken, its leaves fallen, and its seed scattered. There were here some tombs and sarcophagi of white marble, but the greater number are formed out of stones from the Hartz mountains."

HARMONY. [Ἁρμονία, Gr.] *In all the arts.* The just adaptation of one part to another; concord; corresponding sentl-

ment. Harmony is the cause of all grace and beauty in a *composition*, and without it no work of art, however correct in other qualities, can be pleasing. See COMPOSITION. Harmony of expression is also another essential quality to be acquired in the production of a masterpiece of art. See EXPRESSION. There is also harmony of colouring that must be equally sought after by the painter, and harmony of proportion by the sculptor and architect. Upon this portion of the art the best works for consultation are the twentieth chapter of the second part of *Les Elémens de Peinture*, par DE PILES; the second conversation on painting in *Le Recueil de divers Ouvrages*, Amsterdam, 1767; the reflections at the head of *l'Art de Peindre*, a poem by WATELET; MENGS, in his *Leçons pratiques de Peinture*, in the second volume of that painter's works; a work by HOFFMAN, entitled *Essai d'une Histoire de l'Harmonie pittoresque en général, et de l'Harmonie des Couleurs en particulier*, 8vo. Halle, 1786.

Upon the subject of harmony in general as applicable to all the arts, the student may consult, with advantage, the following works: *Epistola de Harmonica Institutione*, by the Abbate REGINO, an author who flourished in the ninth century; *Liber de Harmonica Institutione*, by a Benedictine Monk named UBALD, which was published in the tenth century; both these works are to be found in the *Scriptores Ecclesiastici*, DE GERBERT; *De Harmoniâ, et de Harmoniæ elementis Dialogus*, by ALAN. VARENIO, Paris, 1503, in 8vo.; *De Proportione Harmonicâ*, by JACQUES DE BILLY, Paris, 1658, 4to. and some other works of a similar nature, although their principal applications are to music; *Reflessioni armoniche dal* P. DOMEN SCORPIONI, Naples, 1701, 8vo.

HARP. [heapp, Sax.] *In the archaiology of painting and sculpture.* A musical instrument strung with wire, and played upon with the fingers. The ancients were acquainted with various stringed musical instruments that may be classed under this general name; as the *trigonum*, so called from its shape, supposed to have been borrowed from the Syrians by the Greeks; the *sambuca*, &c. Many of which are to be found among the remains of ancient sculpture.

HASTA. [Lat.] *In the archaiology of art.* A spear or pike used by the ancient Romans. The *hasta* reversed was used as an emblem of peace, and Cicero uses the words *hastam abjicere* in the meaning of to give up the cause; *ad hastam locare*, to make open sale. The *hasta pura* was the pike staff divested of its iron head or point, which was sometimes ornamented with flowers or fruit, like that of Bacchus by a pine cone, called the thyrsis. The divinities to whom the ancients gave this weapon are Æsculapius, Anubis, Apollo, Astarte, Bacchus, Bellona, Castor and Pollux, Ceres, Bybele, Diana, Janus, Isis, Juno, Jupiter, Lunus, Mars, Nemesis, Osiris, Pallas, Pluto, Priapus, Serapis, Sol, Venus, Vesta. The ancients artists and poets also gave the *hasta* to several allegorical or metaphysical divinities, as personifications of Equity, Eternity, Abundance, Clemency, Concord, Fecundity, Felicity, Liberty, Peace. Several heroes and heroines also bore the hasta as a mark of distinction, as Bellerophon and Jobates, upon an antique painted vase in the collection of M. Tischbien; Byzas, Cyzicus, Romulus, &c. The same weapon is found in the hands of many emperors and heroes on ancient coins and vases.

HEBREW Art and Architecture. See ARTS, ARCHITECTURE.

HECATE. [Ἑκατος, Gr.] *In the mythology of the arts.* One of the heathen deities, the same as Diana. See DIANA *triformis*.

HECATOMPOLIS. [Lat. Ἑκατόμπυλος, Gr. i. e. *having a hundred towns.*] *In ancient architecture.* The name of the Isle of Crete, so called from its hundred cities which it had in the time of its ancient king Minos.

HECATOMPYLOS. [Lat. Ἑκατόμπυλος, Gr. i. e. *having a hundred gates.*] *In ancient architecture.* The city of *Thebes* in Egypt, so called from its hundred gates.

HECATONPEDON. [Lat.] *In ancient architecture.* Any temple of a hundred feet in length, particularly applied to that of Minerva Parthenon at Athens. See ATHENS, PARTHENON.

HECATONSTYLON. [Lat. Ἑκατόν-τυλον, Gr. i. e. *having a hundred columns.*] *In ancient architecture.* According to Pomponias's Mela, the name of a celebrated gallery in Rome that was supported by a hundred columns.

HEIDELBERG is a city of Germany, in the circle of the Lower Rhine, formerly the capital of the Palatinate, and recently forming a part of the grand Duchy of Baden. It is a long and narrow town, and is situated at the foot of a mountain on the south side of the Neckar. This river is crossed by a fine bridge, which cost one hundred and seventy thousand florins, and from which there is a fine view upon the river. It is surrounded with walls, which

have six gates. The citadel, called Fort l'Etoile, was long ago destroyed by the French. It contains three churches for Roman Catholics and Protestants, a university, an economical society, anatomical theatre, a military hospital, a cabinet of minerals, models, and physical instruments, a botanical garden, and more than twenty fountains. The university was founded in 1386, and has been under the direction of twenty professors, sixteen Catholic and four Reformed. When the Bavarians took it in 1622, its library was transferred to the Vatican by Robert Maximilian of Bavaria. The fine statue of the elector, the church of St. Esprit, the church of St. Peter, with the sepulchral inscription of the celebrated Olympia Fulvia Morata, are worthy of being seen. The castle and the garden of Heidelberg, situated near the town, are now in ruins. The statues of the ancient Electors and Count Palatines are still to be seen on the front of the castle; the remains of the hall of the chevaliers are still visible; and the granite columns which formerly supported a part of the imperial palace at Ingelheim, near Mayence, are seen supporting the roof of the fountain of the castle.

Heighten, to. [from *height.*] *In painting.* To improve, to meliorate, to make more prominent by touches of light colours, in imitation of the brightness of the lights in nature, contrasted with shadow, commonly called to heighten the lights. See Painting.

Heliack. [*heliacus*, Lat. Ἡλιακός, Gr.] *In the archaiology of sculpture.* An astronomical table, particularly a celebrated antique basso rilievo called the heliack table, which is well described by Armenius, and also by Millin in his Dictionary of Mythology.

Heliocaminus. [Lat. Ἡλιοκάμινος, Gr. *solaris fornax.*] *In ancient architecture.* An arched room made hot by the rays of the sun. Nero constructed one on the portico before his celebrated golden house.

Heliopolis. [from ἥλιος and πόλις, *the city of the sun.*] *In the history of the arts.* One of the most ancient cities in the world of which any vestiges can now be traced. The most enlightened philosophers of Greece and Rome were attracted to this celebrated seat of learning. It was here that Herodotus became acquainted with the sciences and mysteries of Egypt. Plato was here taught philosophy, and about thirty years before Christ its ruins were visited and described by Strabo.

Strabo describes Heliopolis as built upon an artificial mound of earth, so as to be out of the reach of the inundation of the Nile; but owing to the accretion of soil from the annual inundations of that river, the place where it stood is now a perfect plane. In this city was erected a temple to the sun, where a particular part was appropriated for the feeding of the sacred ox, which was here worshiped under the name of Mnevis. There was also another splendid temple, with avenues of sphinxes and superb obelisks, before the principal entrance. Out of the four obelisks which were erected here by Sochis, two were carried to Rome, one was destroyed by the Arabs, and the fourth still remains.

When Pococke visited Heliopolis, he observed the fragments of sphinxes still remaining in the ancient way leading to the eminence on which the temple of the sun stood. These sphinxes are, however, no longer visible. They are, no doubt, covered with the soil deposited by the Nile; and we agree with Dr. Clarke in thinking, that not only the sphinxes, but even the pavement of the temple might be disclosed by a very trifling excavation.

The obelisk or pillar of On, which is now the only piece of antiquity that marks the site of Heliopolis, is about sixty-eight feet high, and six feet and a half wide on each side. According to Dr. Clarke, who has given a very correct engraving of it, it is one entire mass of reddish granite. Each of its four sides exhibits the same characters, and in the same order. Those which face the south have been the least affected by the decomposition of the substance of which they are hewn; and it is from the southern side that Dr. Clarke's engraving is taken. For a particular account of this obelisk, and the hieroglyphics which it contains, the reader is referred to Kircher, *Syntagma*, viii. *Theat. Hieroglyph. Œdipi Ægyptiaci*, tom. iv. p. 330; Pococke's *Description of the East*, vol. i. p. 23; Shaw's *Travels*; Norden's *Travels*; but particularly Dr. Clarke's *Travels*, part 2, sect. ii. p. 98.

Heliotrope. [*heliotropium*, Lat. Ἡλιοτρόπιον. Gr. from ἥλιος, the sun, and τρόπος, a turning.] *In gem sculpture.* A precious stone, so called by the ancients, because by the ancients, according to Pliny, it was used for solar observations by reflection. A species of heliotrope is also called bloodstone, from the red spots of jasper which it sometimes contains. See Bloodstone. It is at present brought from Bucharias, Tartary, Siberia, Scotland,

and some other places. M. LAMETHERIE, in his *Sciagraphe Mineralogique*, has given a very scientific description of this beautiful mineral, which he thinks to be green agate, mixed with spots of red jasper.

HELYX or HELIX. [Lat. Ἕλιξ, Gr.] *In architecture.* A little twist or volute under the flower in the abacus of the Corinthian capital, representing the twisted tops of the acanthus stalk; also called caulicoli. See CAULICOLI.

HEPTAPHONUS. [Lat. Ἑπτάφωνος, Gr.] *In ancient architecture.* According to Pliny, the name of a portico in the city of Olympia, so called from repeating seven echoes or returns of sound.

HEPTAPYLOS. [Lat. Ἑπτάπυλος, Gr.] *In ancient architecture.* A name of the city of Thebes in Bœotia, so called from its seven gates, whereas that of Thebes in Egypt had a hundred gates. See HECATOMPYLOS.

HERALD. *In painting and sculpture.* In the history of the heroic ages we find important functions ascribed to those officers whom the Greeks call κηρυκες, and the Romans *feciales.* Their character is represented as sacred and inviolable; and in Homer their common epithet is "*the divine.*" Their duties were not less numerous than important. They could enter, without difficulty, into cities that were besieged, and mingle, without danger, among contending armies. They summoned the chiefs to the council; they commanded silence, that the discourses of the kings might be heard; and presented to each of them the sceptre before he commenced his harangue. The herald was charged with the most delicate missions, and accompanied his prince on the most difficult occasions. Agamemnon sent only Talthybius and Eurybates to bring Briseis from the tent of Achilles; and when Priam went to beg the body of his son, he took no one with him but his herald. The herald was distinguished by a long rod or sceptre, which he carried in his hand; and from this circumstance it was that the Romans gave him the name of *caduceator.* Eckhel has published a beautiful medal of Crotona, from which we may judge of the dress, a κηρυξ, at a time much later than the age of Homer. He is arrayed in a long tunic like that of a priest, and holds in his hands a *patera* and a *caduceus.* The *patera* denotes a libation or offering to the gods, a function with which the heralds were frequently charged. According to Eckhel this herald is in the act of demanding peace, and the coin was most probably struck at the time when the people of Crotona, humbled by a severe defeat, were obliged to send envoys to beg peace of the Loerians. The attitude of stretching out the right hand seems to have been considered as consecrated to the use of heralds; and it is on this account that, on the imperial medals, the emperor is commonly represented in the same position when he announces peace and security to his people.

The use of heralds was very long preserved among the Greeks. There were heralds whose office it was to proclaim the laws observed at the olympic games, the names of the combatants and the victors, and, in general, every thing which was commanded by the judges of the games. The best account of the κηρυξ of the Greeks, and the FECIALIS of the Romans, is to be found in the works of Grævius and Pitiscus; or, if ancient authors be preferred, in Homer throughout; in Livy, i. 32; Cicero *De Legibus*, ii. 9; and Dionysius Halicarnass. lib. 2. See also AND. DOMINIC FLOCCUS, *de Potestate Rom.* lib. i. c. 9; JOAN. JENSII *commentatio de Fecialibus populi Romani in ferculo Litterario*, Ludg. Batav. 1717, 8vo.; *Dissertationes* JOAN. JAC. MULLERI, Jenæ, 1693; PETRI LAGERLOEFF, *Upsaliæ*, 1698; LAUR. ARRHENII, ibid. 1728; FRANCISCI CONRADI, Helmstadii, 1734; JOAN. GEORG. GRÆVII, *Thesaurus Antiquitat. Romanar.* Ludg. Batav. 1694, 1699, fol.; and among the ancient writers, AURELIUS VICTOR, *De Viris Illustribus*, cap. 5; TITUS LIVIUS, lib. i. cap. 32; DIONYSIUS HALICARNASSUS, lib. 2, and CICERO de Legibus, lib. ii. cap. 9.

HERÆUM. [Lat. Ἡραῖον, Gr.] *In ancient architecture.* A name of temples dedicated to Juno, so called after one of the names (Ἥρα) of that goddess. Pausanias particularly alludes to one so called near to Mycenæ.

HERCULANEUM. *In the history of the arts.* An ancient city of Italy, situated on the Bay of Naples, and supposed to have been either founded by Hercules, or in honour of him, 1250 years before the Christian era. About 957 years later the Romans seem to have taken possession of the city, and to have retained it ever after. In the year 63 it suffered severely from an earthquake, which, according to Seneca, occasioned the total ruin of it, and left the remainder in a tottering state. But in the year 79 an eruption of Vesuvius, for the first time exhibiting volcanic fires to the existing generation, buried the whole many feet deep, under repeated showers of stones and ashes; while other cities were overwhelmed by torrents of liquid lava, or swallowed

up by the earthquakes which accompanied them.

Cuncta jacent flammis et tristi mersi favilla.
MARTIAL.

All memorials of the devoted cities were lost; discussions on the places they had once occupied were excited only by some obscure passages in the classical authors. Six successive eruptions contributed to lay them still deeper under the surface. But after sixteen centuries had elapsed, a peasant, in digging a well beside his cottage in 1711, obtained some fragments of coloured marble, which attracted attention. Regular excavations were made under the superintendance of Stendardo, a Neapolitan architect; and a statue of Hercules of Greek workmanship, and also a mutilated one of Cleopatra, were withdrawn from what proved to be a temple in the centre of the ancient Herculaneum.

Twenty or thirty years afterwards the King of the two Sicilies, with a laudable love of science, directed a complete search to be made among the remains of the subterraneous city, and all the antiquities to be preserved. This was long and ardently prosecuted; and the entrance is now gained by a narrow passage, descending gradually to more than seventy feet from the surface, where it branches into numerous alleys, leading to different streets and buildings. Neither the precise extent or population of Herculaneum can be ascertained, though it is probable that both were considerable; and we know that it was a city of the second order. All the streets run in straight lines; they are paved with blocks of lava, which indicates the vicinity of more ancient volcanic eruptions; and there is, for the most part, an elevated footpath along the sides for the convenience of pedestrians. The houses, whose exterior does not seem to have been ornamental or regular, consisted only of one story built of brick. The walls of many are thrown out of the perpendicular, and some are covered with coloured stucco, upon which are executed paintings in fresco. From the general appearance exhibited by the different edifices, we may safely conjecture that the volcanic matter consisted of very fine dust or ashes, which fell in repeated showers, and perhaps in a humid state, until the city was totally buried under it. Indeed, it was so fine, that the most perfect impressions of the objects thus covered were imprinted there, and, on their being now removed, the cavity may serve for a plaster or metallic cast. By this means innumerable articles were preserved entire, and scarcely displaced from their original position, for the incumbent load received gradual accessions, unaccompanied by any extraordinary degree of heat or violence.

The remains of several public buildings have been discovered, which have possibly suffered from subsequent convulsions. Among these are two temples, one of them one hundred and fifty feet by sixty, in which was found a statue of Jupiter. A more extensive edifice stood opposite to these, forming a rectangle of two hundred and twenty-eight feet by one hundred and thirty-two, supposed to have been appropriated for the courts of justice. The arches of a portico surrounding it were supported by columns; within it was paved with marble; the walls were painted in fresco; and bronze statues stood between forty-two columns under the roof.

Before the year 1738 the theatre was discovered, the size of which has afforded some conjectures regarding the population of Herculaneum. The building was nearly entire; very little had been displaced; and we see in it one of the best specimens extant of the architecture of the ancients. It seems to have had two principal gates, with inscriptions over the architraves of each, besides seven entrances, called *vomitoria*, communicating with the benches. Many columns and pilasters, with laboured entablatures, appeared in the *proscenium*, and some supported bronze and marble statues. The walls were covered with paintings in arabesque, and the floor paved with marble; that of the orchestra, consisting of the finest yellow antique, is preserved nearly entire; and similar decorations adorned the various apartments connected with the theatre. Twenty-five rows of high and wide marble benches accommodated the audience; which, rising gradually above each other, gave a full and distinct view of the arena below. The greatest diameter of the theatre, taken at the highest benches, is two hundred and thirty-four feet; whence it has been computed, that it could contain ten thousand persons, which proves the great population of the city. This theatre was rich in antiquities, independent of that ornamental part to which we have already alluded. Statues occupying niches represented the muses; scenic masks were imitated on the entablatures; and inscriptions were engraved on different places. Analogous to the last were several large alphabetical Roman characters in bronze, and a number of smaller size, which had probably been connected in some conspicuous situation.

A metallic car was found with four bronze horses attached to it, nearly of the natural size; but all in such a state of decay that only one, and the spokes of the wheels, also of metal, could be preserved. A beautiful white marble statue of Venus, only eighteen inches high, in the same attitude as the famous Venus de Medicis, was recovered; and either here or in the immediate vicinity, was found a colossal bronze statue of Vespasian, filled with lead, which twelve men were unable to move; besides many objects entire, there were numerous fragments of others, extremely interesting, which had been originally impaired, or were injured by attempts to obtain them. The Herculaneans are said to have had a particular taste for theatrical entertainments; and some authors have maintained that, disregarding the danger which menaced them, they remained so intent on the performance, that both here, and at Pompeii, they were surprised by the eruption of Vesuvius, and buried under it. But we may reasonably conclude that, with regard to Herculaneum, the theatre did not suffer materially from the earthquake, and that it was not attended with the destruction of the spectators. Remarkably few skeletons have been found in this city, though many occur in the streets of Pompeii; but one appears under the threshold of a door, with a bag of money in its hand, as if in the attitude of escaping, leaving its impression in the surrounding volcanic matter. Nevertheless, it might be here, as we are told of a different city, where the Emperor Nero, appearing on the stage, was surprised by a sudden earthquake; but the audience had time to escape, and the theatre fell without doing any injury. A similar incident occurred within these few years at Naples, where the decorations of the theatre were in visible motion before the terrified spectators, but the strength of its parts resisted the shock.

The exfodiation was prosecuted along the walls of the buildings, turning the corners, and entering by the doors and windows as they occurred. Two marble equestrian statues of the finest workmanship, which had been erected in honour of the two consuls, Balbi and son, were found opposite to the theatre: and in prosecuting the researches into the public edifices and private houses, or even through the streets, the workmen met with many things worthy of observation. A well now containing good water was seen surrounded by a parapet, and covered by an arch which had excluded the ashes. A capacious bath, of a circular form, was penetrated, and also repositories of the dead, still more ancient than the overthrow of Herculaneum. Fragments of columns of various coloured marbles, beautiful musaic pavements entire, and mutilated statues, were abundantly disseminated among the ruins. Some of the pavement, representing figures, has been taken up and again disposed in its original order in a spacious museum prepared for the reception of the antiquities. The public edifices afford a copious collection corresponding to their different uses; but many were utterly destroyed, such as the statues in the building containing forty-two columns. Numerous sacrificial implements, however, such as pateræ, tripods, cups, and vases, were recovered in excellent preservation, and even some of the knives with which the victims are conjectured to have been slaughtered. Numerous domestic utensils employed in the exercise of the arts, and contributing to the amusement of the existing generation, were all preserved.

When we reflect that one thousand six hundred years have elapsed since the destruction of this city, an interval which has been marked by numerous revolutions both in the political and mental state of Europe, a high degree of interest must be experienced in comtemplating the venerable remains of antiquity recovered from the subterraneous city of Herculaneum. Pliny the younger, in his Letters, brings the Romans, their occupations, manners, and customs, before us. He pictures, in feeling terms, the death of his uncle, who perished in the same eruption as the city we now describe; and that event is brought to our immediate notice by those very things which it was the means of preserving. Among these we see the various articles which administered to the necessities and the pleasures of the inhabitants, the emblems of their religious sentiments, and the very manners and customs of domestic life.

Articles in vast variety were obtained from the houses, wherein the beams appeared as if converted to charcoal; but it is to be observed, that all the remains of wood exhibit the same aspect to the very heart. They were not consumed or turned to ashes, owing, probably, to the exclusion of the external air by the showers of volcanic matter. It is singular that while wood, which has remained during ages buried in earth or immersed in water, acquires additional consistence, this has entirely lost what it possessed. Pieces of

thin and delicate texture have preserved their shape, but blocks of a large size are converted throughout to charcoal.

If the subjects recovered from Herculaneum be classed according to their value, the statues should be enumerated first, both as being of the finest workmanship, and of the most difficult execution. Some are colossal, some of the natural size, and some in miniature; and the materials of their formation are either clay, marble, or bronze. They represent all different objects, divinities, heroes, or distinguished persons; and in the same substances, especially bronze, there are the figures of many animals. Sculpture in its various branches had attained a high degree of perfection among the ancients; their religious prejudices and manners greatly contributed to the perfection of the art; and we have ocular demonstrations that the reputation of their celebrated artists was not overrated. Paintings are interesting, but the small portion of the object represented renders them far less so than statues which afford complete imitations, and are thence to be ranked as the most precious relics of antiquity. Here there are two statues seven feet high of Jupiter, and a woman in clay; and two of gladiators, in bronze, about to combat, are much admired. The same may be said of Nero in bronze, naked and armed as a Jupiter *Tonans*, with a thunderbolt in his hand. A Venus *pudica* of white marble, in miniature, is extremely beautiful, and also the statue of a female leaving the bath. In the year 1758 a fine bronze statue of a naked Mercury, supposed to have been the work of a Greek artist, was discovered; and in the course of the excavations extending beyond the confines of the city, a Silenus with a tiger, sometimes his attribute, was found, which had formerly adorned a fountain. Several fauns or other sylvans, with vases on their shoulders, were obtained in the vicinity of Silenus, which are of bronze; and it is singular to observe, that the younger figures have silver eyes, a disagreeable deformity sometimes adopted in marble statues. The figure and attitude of a drunken faun, stretched on a lion's skin, and supported by one full of liquor, presents all the vacuity of thought and sensation of animal pleasure which accompany ebriety; another faun asleep, as large as life, presents a state of absolute repose. We have named two fine equestrian statues of full size. There is also a bronze equestrian statue of an armed Amazon, only sixteen inches high. There are many elegant statues of the goddesses and graces only eight or ten inches in height, and we likewise see some of the monstrous Egyptian divinities with which the Herculaneans were acquainted. Several fine busts, or simple heads of the ancient philosophers, as Zeno or Epicurus, stood in the houses, the name being inscribed below or on a pedestal. Bas reliefs likewise occurred, but few coins or medals. Gold coins of Augustus were found, and silver medallions, two or three inches in diameter, bearing uncertain devices.

The ancient pictures of Herculaneum are of the utmost interest, not only from the freshness and vividness of colour, but from the nature of the subjects they represent. All are executed in fresco; they are exclusively on the walls, and generally on a black or red ground. It has been supposed, from passages in the classics, that the ancients used only four colours, white, black, yellow, and red; but here are added blue and green. Some are of animated beings large as life, but the majority are in miniature. Every different subject of antiquity is depicted here; deities, human figures, animals, landscape foreign and domestic, and a variety of grotesque beings. Sports and pastimes, theatrical performances, sacrifices, all enter the catalogue. Having occasion afterwards to speak cursorily of some of these subjects, we shall content ourselves with observing, that they are more remarkable for variety than for their intrinsic quality. One of larger size found in a temple, and the most celebrated, represents Theseus vanquishing the Minotaur, which lies stretched at his feet, with the head of a bull and the body of a man. A female, supposed to be Ariadne, and three children, form part of the group. This, along with a picture composed of several figures as large as life, of which Flora is the most conspicuous, adorned a temple of Hercules; each is six or seven feet high and five broad. Another represents Chiron teaching Achilles the lyre; and female centaurs are seen suckling their young. The interior of a shoemaker's shop is exposed on a smaller scale; a feast, baskets of fruit, a grasshopper driving a parrot yoked to a car, a cupid guiding swans in the same manner, and many allegorical subjects are represented. It is impossible, within these limited bounds, to enumerate their varieties, but we shall immediately refer the reader to a specific work upon the subject, from which much entertainment will be derived. The king, desirous of preserving

these pictures, directed them to be sawed out of the walls, a work of great labour and perseverance, after which they were put in shallow frames and kept in the museum.

It is said that a triremis or vessel, with three banks of oars, was discovered, with the iron or copper tackle and wood work complete, and that a drawing was taken of it; but the more material parts immediately fell to dust. A sea piece with vessels is among the paintings.

It is extraordinary that numbers of perishable substances should have resisted the corrosions of time. Many almonds in the shells, imprinted with all the lines and furrows characterizing their ligneous envelope, were dug out of the ruins of Herculaneum; figs and some kinds of wild apples were in preservation; and a sort of pine cone yet growing in the woods of Italy, the seeds of which are now ate, or used for culinary purposes. Grain, such as barley, and also beans and peas, remained entire, of a black colour, and offering resistance to pressure. The stones of peaches and apricots are common, thus denoting the frequency of two trees, reputed indigenous in America and Persia. But what is still more singular, a loaf, stamped with the baker's name in Roman characters, or the quality of the wheat, was taken from an oven, and was apparently converted to charcoal. Different parts of plants prepared for pharmacy, were obtained from the dwellings of those who had been apothecaries. After such an amazing lapse of time, liquids have been found approaching to a fluid state, an instance of which cannot be sufficiently admired in a phial of oil, conceived to be that of olives. It is white, greasy to the touch, and emits the smell of rancid oil. An earthen vase was found in the cellars containing wine, which now resembles a lump of porous dark violet coloured glass. We acknowledge, however, that there is great difficulty in comprehending how this change should have taken place. The ancients speak of very thick wines, requiring dilution previous to use, which would keep two hundred years, and would then acquire the consistence of honey. Eggs are also said to have been found whole and empty. Solid pitch was also found at the bottom of a vessel, wherein it had probably melted, as it afterwards did from heat in the museum at Portici, which stands near the entrance to the subterraneous city.

An entire set of kitchen furniture has been collected, which displays several utensils exactly similar to our own. The copper pans, instead of being tinned, are internally coated with silver, probably a better precaution, as more of the poisonous metals are expelled from the latter. These have not been attacked by verdigrease, whence the ancients perhaps understood some branches of metallurgy as well as the moderns. Here is a large brass caldron, three feet in diameter, and fourteen inches deep, an urn or boiler for hot water similar to those on our tables, and also having a cylinder in the centre for a heater. There are pestles and mortars, and all kinds of implements for cutting out and figuring pastry; and, in short, a complete culinary apparatus. Utensils of finer quality are likewise collected which had been employed at tables, as silver goblets and vases, silver spoons, and the remnants of knives. But, from the absence of forks, both among the other remains and in pictures, it is doubtful how far they were known to the ancients. It is probable, indeed, that their invention and common use are to be dated several centuries later.

Several articles belonging to personal ornament and decoration occurred. We shall not speak of the colours still in a condition fit for painting, because it is questioned whether they were such as it is known the ladies of that generation were accustomed to use for more ordinary purposes. Besides, they are red, blue, and yellow. Those with which females heightened their complexion were prepared from both minerals and vegetables, the latter being chiefly marine plants. Two silver bodkins, with which they pinned up their hair, eight inches in length, are preserved, the end of one appropriately sculptured with a Venus adjusting her tresses before a lookingglass held by Cupid. Gold armlets, bracelets, necklaces, with pieces of plate gold suspended to them as a locket, are preserved. Small nets also with fine meshes, which, some have supposed, the ladies employed to tie up their hair; and others of coarser texture, which must have been used for other purposes. Pieces of cloth, coloured red on one side, and black on the other, were found on the breast of a skeleton; the texture of which, whether silk, woollen, linen, or cotton, antiquaries have not been able to decide. Very few jewels are discovered, which favours the idea of the inhabitants having had time to escape. There was a wooden comb, with teeth on both sides, closer on one of them than on the opposite; and portions of gold lace fabricated from the pure metal. San-

dals of laced cords are seen, though it is more commonly believed that leather was in general use among the Italians; and a folding parasol, absolutely similar to what we esteem a modern invention, was likewise discovered.

There is kept in the museum a case of surgeon's instruments complete, with pincers, spatulæ, and probes; also a box supposed to have contained unguents; and pieces of marbles, employed in braying pharmaceutical substances. A variety of carpenters' and masons' tools, as chisels, compasses, and trowels, were found, resembling our own; and bolts and nails all of bronze.

The weights and measures of the ancients have excited considerable discussion, which those preserved in Herculaneum may elucidate. Different balances appear, of which the most common is analogous to the Roman steelyard; but those with flats for scales, though wanting the needle, are likewise seen. The weights are either of marble or metal, of all gradations up to thirty pounds; and from the marks exhibited by a set, well made, of black marble, in a spherical shape, it is supposed the pound was divided into eight parts. A weight is inscribed *eme* on one side, and *habebis* on the other. There are pocket long measures, folding up like our common foot rule, which may throw some light on the length of the Roman foot. Neat copper vases are supposed to have been measures for grain; the capacity of one is one hundred and ninety-one cubic inches.

The various implements for writing repeatedly occurred; and among the pictures is a female apparently listening to dictation. That the ancients were perfectly acquainted with the art of making glass is proved by the varieties discovered in these exfodiations. Considerable numbers of phials and bottles, chiefly of an elongated shape, are preserved; they are of unequal thickness, much heavier than glass of ordinary manufacture, and of a green colour. Vessels of cut white glass have been found, and also white plate glass, which antiquaries suppose was used in lining chambers called *cameræ vitreæ*. Coloured glass or artificial gems engraved, frequently occur; and the paintings exhibit crystal vessels. We may remark, in this place, that any one who studies the antiquities of Herculaneum will find his researches greatly facilitated by frequent reference to the epigrams of Martial, whom nothing used in ordinary life seems to have escaped.

The beauty and variety of the vases have attracted particular notice, and they serve as excellent models for the moderns; for all the skill of the ancient artists seems to have been exhausted in their execution. There is one preserved, four feet in diameter, of fine white marble; others are of earthenware or silver, and the majority of bronze or copper. Some are low, wide, and flat; others tall and narrow, plain, fluted, or sculptured. Sacrificial vases were supported on tripods, whose construction seems to have been attended with equal care. Some of the latter are richly sculptured with real and imaginary figures of men and animals. One is ornamented with three lions' heads, and is supported by as many paws; another rests on three Priapeian satyrs of elegant workmanship, or on the feet of eagles. The god of the gardens seems to have been treated with peculiar regard by the Herculaneans. He appears with all his attitudes of every possible variety, figure, and dimensions, in tripods, lamps, and household utensils. The articles on this subject are so common as to constitute a large branch of curious antiques, concerning the emblematic use of which we can only entertain conjectures. Several tripods are very ingeniously constructed, so that the feet may be closed or expanded by double sets of hinges. Endless diversity and infinite elegance are displayed in the lamps; few chandeliers have been discovered, at least they are so rare, that we may doubt whether the inhabitants often resorted to lights from wax or resinous substances. Sometimes a lamp appears as a shell, sometimes as a bird; then a human figure, or resembling a quadruped. The vases, lamps, and tripods were particularly used in sacrifices, several of which are represented in the pictures; and among others, are sacrifices to the Egyptian deities. There were many funeral urns and sepulchral lamps, such as those, regarding which vague ideas have been entertained, as formed for containing perpetual fire.

In regard to sports and pastimes, numerous remains render us familiar with those of the ancients. Here we find dice, with the same disposal of points on a cube; and dice-boxes of bone or ivory, like those now used, besides some of a flattish shape. Several are false, being loaded on one side; and the manner of throwing the dice appears on a picture. No musical instruments were found but the sistrum, which we imperfectly understand, cymbals and flutes of bone or ivory are yet obtained. However, a concert is represented

on a picture sixteen inches square, containing a lyrist, a player on a double flute, probably by a mouth piece, and a female apparently singing from a leaf of music; besides other two figures. Several theatrical masks, of different fashions were found in clay and metal along with moulds for their formation. Their use in dramatic representations, regarding which the reader may consult a work by *Ficoroni*, is well known, and is the subject of many of the pictures. The theatre, we repeat, was a favourite resort of the ancients; and some ivory tickets of admission, with author's name and that of the piece, are preserved from Herculaneum. Rope-dancing is exhibited in pictures, wherein all the modern dexterity of playing on musical instruments, pouring out liquids into cups, and other feats of address are shown. The most elegant and graceful of the Herculaneum pictures are perhaps female dancers suspended as it were among the clouds.

It is to be observed in general, with regard to the numerous articles relative to this brief detail, that the quality of the statues infinitely exceed that of the pictures; and that the vases, and tripods, lamps, and candelabra, are frequently of the finest workmanship. Of many once complete, only fragments at this day remain; and while gold, silver, bronze, or clay remain entire, iron has altogether wasted away.

After a vast collection of antiquities had been made, the king resolved on publishing a laborious and expensive work, containing engravings of those which appeared most curious. In the course of thirty-eight years, from 1754 to 1792, this was accomplished in nine folio volumes, including the pictures, bronzes, lamps, and candelabra. The first is devoted to a catalogue, five to pictures, two to the bronzes, and one to the *lucerne*. No less than seven hundred and thirty-eight pictures are named in the catalogue, and the other articles are proportionably numerous. The work was, with royal munificence, presented to the principal public libraries in Europe; but owing to the succession of the King of the Sicilies to the crown of Spain, it is seldom to be seen complete. At the same time, it has been affirmed that some of the engravings of the pictures appear with a perfection and delicacy which do not belong to the originals, although their general character be not lost.

In penetrating an apartment of a villa in the neighbourhood of Herculaneum, a number of supposed pieces of charcoal were carried off, which, by accidental fracture, exposed the remains of letters, and proved so many ancient manuscripts. Here Camillo Paderni, the keeper of the museum, buried himself during twelve days, and succeeded in carrying away three hundred and thirty-seven manuscripts; and, by subsequent careful research, the total number recovered now exceeds eighteen hundred. They were in various stages of dacay; some so much disfigured and obliterated, that nothing could be determined regarding their nature from the beginning. However, the king instituted a society for investigating them completely. High expectations were formed by the European literati, of the knowledge which would be acquired respecting the history, the manners, and the customs of antiquity; more especially as the materials themselves indubitably remounted to a period of more than sixteen hundred years. The manuscripts consisted of rolls, scarcely a span in length, and two or three inches in thickness, formed of pieces of Egyptian papyrus glued together. Some had a label in front, at one end of the roll, exposing the name of the work or the author, as it occupied its place in the library. But the substance of the involutions was so crushed together, the ink or pigment employed for the character had faded to such a degree, that, united to the general injury which they had received from time, and the heat to which they had been exposed, the opening of them seemed at first sight to be impracticable. Acordingly, some snapped asunder like burnt wood, others flew into fragments, or they exposed nothing. The assistance of Piaggi, a monk, was obtained from the Vatican, who invented an ingenious method of unfolding the manuscripts without destruction, by means of a mechanical apparatus. The process was slow, but tolerably certain; and the first manuscript put on the machine, being unrolled in the year 1754, proved to be a treatise in Greek capitals, written by Philodemus, an Epicurean philosopher, against music, with his name twice inscribed at the end, or interior of the roll. Similar means were adopted with other manuscripts, and they were partly successful. Almost the whole of the manuscripts are in Greek, very few having hitherto been found in Latin; and some of the rolls are forty or fifty feet in length. The entire surface of the roll is divided into successive columns, resembling our ordinary pages, each containing from forty to seventy lines in different manuscripts, this being dependent on the size of the roll; but each line is only about two inches

long, and the column is no broader. In the original state, therefore, the reader held the roll before his eyes with one hand, while he unwound it with the other, as is represented by some of the Herculaneum pictures. Uncommon difficulties were experienced from the decay of the substance, from frequent blanks and obliterations within, and from the absence of punctuation. Four volumes, all by Philodemus, were successively unrolled; and, in 1760, Piaggi reached a fifth by another author, on botany. But the king was induced to order it to be withdrawn, and a sixth volume was put on the machine, where it remained thirty-six years. After twenty years preparation, the work on music was published, with illustrations by Mazzocchi, a learned Italian, under the title *Herculanensium voluminum quæ supersunt, tomus* 1. Napoli, 1793. It must have been anxiety for publication, not the desire of enlightening the world that led to the selection of this volume; reputed a dull and controversial performance, which the utmost ingenious commentary is incapable of enlivening. Cicero, notwithstanding, has called the author *optimum et doctissimum;* Piso, the supposed owner of the manuscripts, derived his philosophy from him, and he was well skilled in the polite literature of the period. In the course of forty years from the discovery of the manuscripts, which were gradually withdrawn; only eighteen were unfolded. The accession of Charles, indeed, to the crown of Spain, and the death of Mazzocchi, had enervated the Herculanean Society, which was renewed in 1787 by the Marquis Caracioli, and the secretary of state thenceforward placed at its head. Yet the work advanced very tardily; few persons were employed, either from the difficulty or want of interest in its prosecution; and it was perhaps totally interrupted by the political events which disturbed the peace of Europe. Meantime six of the manuscripts were presented, along with other Herculaneum curiosities to Buonaparte in 1802, by the sovereign of the Sicilies, in whose reign, indeed, we believe that both Philodemus and the volume of Lucerne were published; and ten volumes are said to have been sent, on some occasion, to the Prince of Wales.

At length a proposal was made on the part of this country, to cooperate with the Neapolitan government on a subject so important to the diffusion of literature as that of elucidating the Herculaneum manuscripts; and Mr. Hayter, chaplain to the Prince of Wales, was appointed with a regular commission to superintend their subsequent developement. A parliamentary grant of £1200 was next obtained to aid its prosecution; and Mr. Hayter having commenced his operations under the most favourable auspices in 1802, employed thirteen persons in unrolling, deciphering, and transcribing. Some improvements seem to have been attempted in the evolution of the manuscripts by a chemical process; but of those subjected to it, we are told "the greatest part of each mass flew under this trial into useless atoms; besides, not a character was to be discovered upon any single piece: the dreadful odour drove us all from the museum." Mr. Hayter continued his operations from 1802 to 1806, during which time he affirms that more than two hundred papyri had been opened wholly or in part, and he calculated that the remainder would have been unrolled and copied within six years farther at latest. But as to the precise nature and description of these manuscripts, the accessions which literature has gained or would gain by the work, we are only informed that certain facsimiles of some books of Epicurius were engraved.

It cannot but be considered particularly unfortunate that the public expectation, so repeatedly excited, regarding what are to appearance among the most interesting memorials of antiquity, should be as often disappointed. Admitting every possible difficulty, and all the opposition which might have been experienced unquestionably, there were sufficient materials to make a specific report regarding the state and description of the manuscripts, towards the developement of which the public had so liberally contributed.

In 1806, during Mr. Hayter's operations, it became necessary to evacuate Naples; but the existing government acquainted him that the King had prohibited the removal of the manuscripts; and in the flight of the court every thing was abandoned to the French, who seem to have continued the assistants in unrolling and deciphering as before. From the opposition which Mr. Hayter experienced, he could do nothing more than retire with some of the facsimiles to Palermo, where it appears he superintended engravings of them. Yet misunderstandings with the secretary of state prevented him from procuring a complete copy of the whole, until the British ambassador interfered.

Ninety-four facsimiles copies were then obtained, partly engraved, it would seem, and partly in manuscript. These were carried to England by Mr. Hayter on his

final recal in 1809, and presented by the Prince Regent to the University of Oxford. However, a very confused and indistinct account of the whole of this matter has reached the public, which compels us to be thus brief regarding the history of the Herculaneum manuscripts.

Perhaps it may ultimately be found that they are less worthy of notice than was anticipated, particularly if we are entitled to form any judgment regarding the rest, from the inconsiderable portions that have already been published. See *Antichità d'Ercolano*, 9 vols. in folio; Bayardi *Prodromo delle Antichità d'Ercolano; Notizie del Scoprimento dell' antica Citta d'Ercolano;* Vinuti *Descrizione delle prime Scoperte dell' antica Citta d'Ercolano;* Murr *de Papyris Herculanensibus;* Drummond and Walpole, *Herculanensia;* Hayter's *Letter and Report on the Herculaneum Manuscripts; Philosophical Transactions* for 1751, 1753, 1754, 1755, 1756; and Sir W. Hamilton, *Campi Phlegræi*, p. 58. Likewise refer to the interesting article on the same subject in Dr. Brewster's *Edinburgh Encyclopædia*, from which this article is mainly taken: *La Lettre de* Winckelmann *au Comte de Brühl; La Relation des nouvelles Découvertes faites à Herculanum*, by the same author; also his *Six Letters, written in Italian, and addressed to M. Bianconi:*—A French translation of these three works was published in Paris, in 1784, by M. Jansen. Fougeroux de Bondaroy, of the Royal Academy of Sciences, has published *Recherches sur les Ruines d' Herculanum et sur les Lumières qui peuvent en résulter, relativement à l'Etat présent des Sciences et des Arts, avec un Traité sur la Fabrique des Mosaïques*, 12mo. Paris, 1770. Henri Math. August. Cramer put forth, at Halle, in 1773, *Détails pour servir à l'Histoire des Découvertes d'Herculanum, avec une Préface de* J. J. Rambach. Added to these, a little German work on the *Ruins of Herculaneum and Pompeii*, 8vo. Gotha, 1791, with plates, gives an interesting notice of these discoveries. See POMPEII.

HERCULES. [Ἡρακλῆς, Gr.] *In the mythology of art.* One of the most illustrious heroes of antiquity, and the first of the *Dii Minorum Gentium*, or demigods. He was descended from the kings of Argos; but in the Pagan mythology, he is said to have been the son of Jupiter by Alcmena, the wife of Amphitryon, King of Thebes. The period of his birth is uncertain. Herodotus places it about the year 1282, before the commencement of the Christian era; and in Blair's *Chronological Tables*, his death is placed in the year 1222, B. C.

Hercules was peculiarly honoured among the Greeks, by the epithet of *Musagetes*, the conductor of the Muses; and among the Romans, by that of *Hercules Musarum.* In reference to these titles, he is represented, on medals, with a lyre in his hand; and the reverse is marked with the figures of the nine Muses, with their appropriate symbols.

The chief attribute of this deity, however, or the distinguishing character of his figures, is incomparable strength. Amongst the others are a lion's skin, a club, and a bow. The lion's skin is sometimes so put on, that the head and jaws of the beast appear over the head of the hero. See ATTRIBUTES.

Hercules, with very great merits, had, notwithstanding his alleged choice of virtue in preference to pleasure, as described by Xenophon, faults as great. He was a slave to amorous propensities, and drank as immeasurably as he fought courageously. The Drunken Hercules is, indeed, no uncommon figure still. According to Statius, he was invoked (in the *lectisternia* made to him by the Romans) under this character. A friend of Statius had a little figure of this god, which he put upon the table whenever any gaiety was going forward. The figure held a cyathus in one hand, and his club in the other, with a good-natured mild look, as if inviting others to be as well pleased as himself. This little statue is remarkable for having run through a series of the highest fortunes of any upon record. It was a Hercules in miniature, of brass, cast by the famous Lysippus. Before it came to Statius's friend, it had belonged to Sylla; before him, to Hannibal, and was his fellow traveller into Italy, as, previously, it had accompanied Alexander the Great in all his expeditions. It was not a foot high, therefore portable enough. This history of it is given by Statius at large.

Hercules is represented much in the same manner on an ancient gem by Admon, at the Verospi at Rome, which our author thinks was copied from this very figure.

The Twelve Labours of Hercules are so notorious that we do not conceive it necessary to enumerate them.

HERESY. [*hæresis*, Lat.] *In mythological sculpture and painting.* "Many modern painters and sculptors," says Winckelmann, in his Essay on Allegory, "have employed their talents to represent Heresy, in forms the most hideous and revolt-

ing, at the feet of pictures and statues of the saints;" and such representations are very frequently to be met with in the cathedral church of St. Peter at Rome, as well as in other Catholic places of worship, their exclusive and dogmatising "modes of faith" rendering any departure therefrom far more unpardonable to them than similar differences of opinion are to the followers of milder and less arbitrary systems of Christian belief. Winckelmann himself thinks that the most efficient method of personifying this abstraction would be under the figure of a female, who, prostrate on the earth, either seeks to conceal her shame, or meditates, in bitterness of heart, on means to avenge her humiliation.

The term Heresy is often applied to art itself, and is then understood, as indeed will be obvious, to refer to any performance which is executed in neglect or contempt of established and recognised principles.

HERMAPHRODITE. [ἑρμῆς, Hermes, and ἀφροδίτη, Venus, Gr.] *In sculpture.* "This being," says Millin, "must be considered as a fiction of the imagination, produced by a people who possessed the art of embellishing every thing—the Greeks; who designed, in the hermaphrodite, to represent a union of all the excellencies peculiar to either sex." In point of taste, we must beg leave to differ from the intelligent Frenchman. Although in theory this combination may be exceedingly fine, yet when an attempt is made to place it visibly before us, the result is certainly, to our apprehension at least, any thing but ornamental—it is, indeed, offensive. In ancient mythology the hermaphrodite is said to have proceeded from an amour between Mercury and Venus, as is indicated by the etymology of the name. Venus was esteemed the queen of all beauty; and Mercury, to his personal accomplishments, added wit, knowledge, and, in short, talent of every kind. These blended qualities are then to be supposed to descend upon their common offspring, who thus becomes the representative of all imaginable human perfection*. The painters of the Greek vases, who, by the by, were not at all scrupulous as to the nature of their delineations, made no small use of this ideal personage; and M. Millin speaks of a crouching statue of the same kind in the sculpture gallery of the Louvre, which he describes as a copy of the celebrated Borghese *hermaphrodite;* and that admirable sculpture itself, according to M. Visconti, is but an imitation, in marble, of a bronze figure executed by Polycles, and mentioned by Pliny. All these figures have the breast of a woman, with the sexual organs of a man. In other respects they are generally represented, both with regard to shape and countenance, as feminine.

HERMATHENE. [ἑρμῆς, Hermes, and ἀθήνη, Minerva, Gr.] *In sculpture.* A little further on the reader will find, in our description of the word Hermes, a general account of the kind of figure designated thereby. A Hermathene is simply the same thing surmounted particularly by a head of Minerva, whom the Greeks were fond of calling Αθήνη, or by the heads of Minerva and Mercury together, placed back to back.

HERMERACLE. [ἑρμῆς, Hermes, and ἡρακλῆς, Hercules, Gr.] *In sculpture.* By this word is indicated a Hermes surmounted by a head of Hercules alone, or by the united heads of Hercules and Mercury. These figures were generally set up to adorn places for the exhibition of gymnastic exercises, of which Mercury and Hercules were esteemed jointly the protecting deities.

HERMEROS. [ἑρμῆς, and ἔρως, Gr.] *In sculpture.* This term, composed of the two words, *Hermes*, Mercury, and *Eros*, Love, is used to designate a Hermes surmounted either by the united heads of these deities, or by that of Love singly.

HERMES. [ἑρμῆς, Gr.] *In sculpture.* This is one of the names of Mercury, a personage very celebrated amongst the mythological deities of the ancients; and of whom we propose to give a more particular account under the latter cognomen. Our subject at present is to afford the reader some information respecting those peculiar-looking little figures one now and then encounters in sculpture, which resemble a stone placed upright, and which, increasing in width towards the top, terminates in a head or bust. To these odd-looking sculptures, whatever the character of the head by which they are crowned, the general name of Hermes has been appropriated, even from ancient times, and several reasons are recorded for thus designating them, but these are, generally speaking, destitute both of probability and interest. The following explanation appears at once the most obvious and the most credible.

* Another version of the story states, that the nymph Salmasis fell in love with him, and begged of the gods that their bodies might be always united, and make but one.

Hermes or Mercury, though the patron of robbers, was supposed, at the same time, to preside over the highways. The statues of this Mercury were of that odd terminal shape so much in vogue in the best ages of antiquity. These old termini were sometimes without, but oftener with busts, or half figures of some deity on them; and those of Mercury so much more frequently than any other, that the Greeks gave them their uniform name Ερμαι, from this god.

There is an allusion in Juvenal (Sat. viii. v. 1—67) which would strike us more strongly were we used to see these terminal Mercuries as commonly as the Romans were of old. The satire turns upon this assertion, that where there is no virtue, there cannot be any nobility. Virtue, among the Romans, was "a man's exerting himself in the service of his country or friends:" so that the comparing a man to a figure without arms or legs must convey the strongest idea of his being the most useless of mortals.

HERO. [Gr.] *In mythological painting and sculpture.* A beautiful maid of Sestos (a town upon the European shore of the Hellespont), the priestess of Venus, whom Leander, who lived on the other side, falling in love with, was wont to come to at nights, swimming over the streights. He at last being drowned in one of his attempts, Hero threw herself off her turret into the sea to him.

HERODOTUS. *In archaiology and the history of the arts.* The most ancient of the Greek historians whose works are extant, and thence called by Cicero the Father of History, was born at Halicarnassus in Caria, in the first year of the seventy-fourth olympiad, or about 484 years B. C.

The history of Herodotus embraces a period of about 240 years, from the time of Cyrus the Great, to Xerxes; and contains, besides the transactions between Persia and Greece, a sketch of the affairs of other nations, as the Lydians, Ionians, Lycians, Egyptians, and Macedonians. The work is divided into nine books, which are called after the nine Muses; not by the historian himself, but, as it is thought, by the Greeks at the Olympic games, when they were first recited, as a compliment to the author.

Besides this work, Herodotus is supposed to have written a history of Assyria; which, if it was ever published (a fact that seems doubtful), is now lost. The Life of Homer which is usually printed at the end of his works has also been ascribed to Herodotus; but the best critics are of opinion that it is the production of a different author.

The two best editions of Herodotus are that of Wesseling, fol. Amsterdam, 1763; and that of Glasgow, in 9 vols. 12mo. 1761. A very excellent edition of Herodotus, in Greek and Latin, was published in Edinburgh by Mr. Laing, in 7 vols. 12mo. in the year 1806, corrected by Professor Porson and Professor Dunbar. The *editio princeps* is that of Aldus, Venet. fol. 1502. There are two English translations of this historian; the one by Littlebury, in 2 vols. 8vo. and the other by Mr. Beloe, in 4 vols. 8vo. with many useful and entertaining remarks and annotations. There is also an excellent French translation, with very learned notes, by M. Larcher. The geography of Herodotus has been examined and explained by the ingenious Major Rennell, in one volume, 4to. 1800.

HEROES. [Lat.] *In archaiology.* Noble and famous men, who for their great acts and virtues were deemed to come next to the immortal gods; and they obtained such an opinion among men, that after death they were themselves deified, and therefore called ἡμίθεοι, semidei, i. e. demigods. Such were those whom they fancied to have had one parent mortal, the other immortal.

HEROIC. [from *hero.*] *In painting and sculpture.* This is a derivation, as will plainly appear, from the word hero. Those are denominated the heroic ages which occurred before the capture of Troy, and during which those heroes are said to have existed whose praises have been sung in verse so glowing and impassioned by Homer and other ancient poets. In the arts the term is applied to such performances as represent the actions of these half-fabulous personages, and, by some stretch of courtesy, to a delineation of any surprising effort of courage or strength. It has been considered desirable, in the treatment of subjects of this nature, to give full play to the imaginative faculty, and to deck the principal figure with personal attributes which rise above the common lot of humanity. In point of costume, it is customary either to leave the figures naked (with the exception of a helmet), or to throw a mantle loosely across the shoulders, loins, &c. It was usual, by way of compliment, thus to represent the Roman emperors: and the custom has descended with regard to many princes of more recent times. The statue of the Emperor Napoleon, by Canova, was one of the

latest specimens worthy notice of the heroic style. He is represented under the characteristics of Mars.

HEXASTYLE. [ἑξ, six, and στῦλος, a column, Gr.] *In ancient architecture.* The term applied to that description of temple or other ornamental building, the principal façade of which is ornamented by six columns.

HIEROGLYPHICS. [ἱερὸς, sacred, and γλύφω, to engrave, Gr.] *In archaiology.* Such is the appellation given to those sacred characters with which the Egyptians decorated the greater part of their monuments, and which formed a species of writing understood only by the priests, and unintelligible to all the rest of the nation; and which became at length, as it would appear, unknown even to those holy personages themselves. This name of hieroglyphic has been since applied to every description of arbitrary characters which has been framed for the use of the initiated few possessed of a key thereto: but such application is an unjust one; the etymology of the word proving that one cannot fairly understand by it any other than the mysterious writing first alluded to, and peculiar to the Egyptian priesthood.

It is necessary, says M. Millin, in a somewhat fanciful theory, speaking of this subject, to distinguish two several sorts of writing—that of thought and that of sound. The writing which he ventures to denominate that of thought, expresses an *action* with all its circumstances—and of this several varieties may be easily recognised. Even the least civilized among men have a decided tendency to the principle of imitation, guided by which they are led to trace upon the sand, on wood, or on stone, the rude resemblance of such objects as have most excited them, in order to recall and fix them in their memory. From this imitative principle has been deduced the art of pictorial design; an art which preceded the use of written characters, but which, it is obvious, could only be applied to things actually physical, and was incapable of bearing any relation whatever to the imaginative or metaphysical. In the due progress of civilisation it would become desirable that these qualities should be expressed, as well as those which appeal merely to the senses, and hence would appear the necessity of having recourse to conventional signs: thus, the reader will perceive, sprung up the system of *symbolical* writing. In pursuance of this system, the most notorious attributes applicable to humankind were imaged by the figures of various sensible objects. The sun became symbolical of *glory*, and not unfrequently, of the Deity himself; the lion characterized *courage;* the dog *fidelity;* the serpent, with tail in mouth, was emblematical of *immortality.* In course of time these symbolical characters became very numerous, and it was therefore deemed essential to simplify and contract their forms, that much meaning might be introduced in small space. In this ingenious contrivance the Egyptians distinguished themselves beyond all other nations. At length, when alphabetical writing became known, the original symbolical signs were reverenced by the common people as images of their gods, and the abridgment of those characters was resolved into the term of hieroglyphics. Many learned persons have attempted to elucidate and explain the meaning of such examples as are yet extant of Egyptian hieroglyphics; but they are wrapped up in such impenetrable mystery, that it has become proverbial to apply the term to any thing in writing obscure and indefinable. The figures which, either entire or abridged, are used sometimes materially, sometimes symbolically, in the composition of hieroglyphics, are distinguishable into five sorts: animals, plants, instruments, household goods, and mathematical figures. These are capable of furnishing combinations incalculable. Horapollon, in his Treatise on Hieroglyphics, has given some rude explanations of these signs; and Hermapion, whose very name is indicative of an Egyptian origin, has also several times written on hieroglyphics in a work from which Ammianus Marcellinus has drawn a description of the obelisk of the grand circus. Kircher, however, satisfactorily proves that Hermapion's elucidation is a false one, but his own substitution is not a jot more luminous. It cannot be doubted that, as the art fell into disuse, and was superseded by the invention of alphabetical characters, the priests took up the thing, and discountenancing the practice of symbolical writing among the common people, preserved it themselves, and turned it into an engine for obvious purposes; namely, to exact wonder and reverence, and to conceal the mysteries of their profession. To such a height did the superstition respecting these matters reach, that the various emblematical figures have frequently been engraven on precious stones, which were carried about as amulets by the besotted wearers. M.

Niebuhr has devoted great attention to this subject; he has made several copies, but chiefly at Cairo, where, unfortunately, the specimens are neither the most ancient nor the most curious. From the account of the travels of M. Denon, who went to Egypt in the suite of the French army, and from the intelligent Treatise on Obelisks of M. Zoega, much interesting information may be deduced. See ÆNIGMA.

HILARITY. [*hilaritas*, Lat.] *In mythological sculpture and painting.* Gaiety or joy personified. Upon most of the Roman medals we find this quality represented under the figure of a matronly female, holding in her right hand a laurel branch, which she bent towards the earth, and in her left a cornucopia. Green boughs have always been esteemed symbolical of gaiety and rejoicing, and are constantly used as such to this day both in public and private buildings.

HIPPOCAMPUS. [ἵππος, a horse, and κάμπη, a bend, Gr.] *In the archaiology of sculpture.* A sort of sea-monster, of which the upper part resembles a horse, while the whole remainder of the body is that of a fish. This fabulous animal is frequently to be found represented on medals, and is the one spoken of by poets as drawing the car of Neptune and Amphitrite. In the hippodrome of Constantinople there is said to have been a hippocampus, of which Nicetas makes frequent mention, and to which he applies the name of river horse, or horse of the Nile, the tail of which was covered with scales. It must, however, be borne in mind, that this author was greatly given to fabling, and his testimony must accordingly be received with no small caution. See HIPPOPOTAMUS.

HIPPOCENTAUR. See CENTAUR.

HIPPOCRATIES. [from Hippocrates.] *In archaiology.* A fête celebrated in honour of the god Neptune. It was much used amongst the Arcadians. During the continuance of these fêtes, the horses were held exempt from all labour, and were promenaded through the streets and over the open country, superbly harnessed and decorated with garlands of flowers. The Romans celebrated a similar festival, which they denominated Consualia.

HIPPODROME. [ἵππος, a horse, and δρόμος, a course, Gr.] *In ancient architecture.* A place appropriated among the Greeks to equestrian exercises, and in which they disputed for the prizes. The name was afterwards adopted by the Romans and other nations. Of all the hippodromes of Greece, that of Olympius was the most remarkable. It was, according to tradition, four leagues long and one broad.

There are in England some vestiges of similar courses, the most remarkable of which is that near Stonehenge.

HIPPOPOTAMUS. [ἱπποποταμὸς, a river horse, Gr.] *In the archaiology of painting and sculpture.* The river horse, found only in Africa. It has been chiefly discovered on the banks of the rivers Nile, Niger, Gambia, and Zaire. It is sometimes seen in salt water.

Although an inhabitant of the waters, this formidable animal is well known to breathe air like land animals; indeed, on land he finds the chief part of his food.

This animal, probably from its anomalous nature and appearance, has been made great use of by the poets and artists, and several grotesque and exaggerated representations of it have come down to us from the ancients.

There is an account of an hippopotamus having been, for the first time, publicly exhibited at Rome, at the games celebrated in honour of Julius Cæsar; and it is frequently found since engraven on Roman medals, sometimes alone, sometimes with a young boy mounted on it. It is often connected with an emblematical figure of the Nile on the medals of Trajan and of Hadrian. Spanheim speaks of one, on which appeared two of these beasts drawing the triumphal chariot of Trajan.

The hippopotamus differs but in name from the hippocampus, already mentioned. It is certain that an animal somewhat resembling the fabulous descriptions alluded to has existed, and possibly still does: but we suspect that, even in Egypt, its appearance is now exceedingly rare. See HIPPOCAMPUS.

HISPANIA. [Lat. Spain.] *In the history of the arts.* A large country of Europe, separated from Gaul by the Pyrenean mountains, and bounded on every other side by the sea. Upon several of the imperial medals, Spain is represented under the figure of a female in a military habit, holding in one hand ears of corn and olive branches, symbols of the fertility of the country, and in the other two javelins, to indicate the warlike propensity of its inhabitants. The rabbit also served for an emblem of this country, from its extreme fecundity there. There is a curious story in Pliny, of these animals undermining an entire Spanish town; and Strabo says, that in one place the inhabitants demanded of the Romans to be transported into some other land, alleging

themselves unable any longer to resist the encroachments of these alarming excavators.

Historical Painting. See Painting.

History. [*historia*, Lat.] *In all the arts.* In its general sense, history consists of that description of knowledge which belongs to narrative; and stands opposed to science, which is demonstrated knowledge, and to philosophy, which is matter of opinion. Literally, this word is applicable only to that information which the writer gives on his own knowledge. Those who write *histories* of things or events which they have not themselves seen, are mere compilers of the testimonies published by others.

History is naturally interesting in the highest degree; we cannot but take the liveliest concern in the transactions of our fellow-creatures; and, if time be measured by the succession of ideas, this study certainly antedates our lives, and makes us live through the ages that have preceded our birth. Nor is the importance of history inferior to its fascinations; it is the source, immediate or mediate, of almost all our ideas. No man who is acquainted with facts can form a theory without taking these into the account: we seldom speak or think of human nature without some reference to the actions which we believe mankind to have performed.

I am very desirous of impressing deeply on the mind of the student in art the great importance, if to all, more particularly to him, of the study of history. He should understand well both chronology and geography, in order that he may avoid all confusion, either of time or place. He should be thoroughly acquainted with mythology, and, in a word, with history both ancient and modern, that he might have a plentiful choice of subjects, and that he might be careful to give to those personages whom he selects the attributes and characteristics which are proper to each.

To those who are desirous of studying history with advantage, it is always recommended to make geography a correlative pursuit; and farther, to have at hand a map of the country the history of which they are reading. The learner cannot be too sedulous, also, to reduce the medley of events into order; and to form in his mind an accurate abridgment of the narrative. It is not here recommended to commit any former abridgment to paper (for in that case it will presently be forgotten, and the student's knowledge be to be found not in his head, but in his escritoire); nor ought historical reading to be confined to that of the abridgments of others: these have their use; but we cannot know too many particulars: it will often happen that some unnoticed circumstance overturns, in the mind of a man who thinks for himself, all the specious fabric that partial historians have set up.

Homeric. [*Homericus*, Lat.] *In archaiology.* That which appertains to Homer, or to the eras of which his divine poems treat. There was formerly a species of divination practised, entitled the Homeric lots, which consisted in opening the volume at random, and the first verse which caught the eye was held to be oracular respecting the question by which the inquirer was agitated. The same sort of thing has obtained with regard to the works of Virgil; and more recently, among the early Christians, this superstitious feeling sought for satisfaction by similar reference to the sacred pages of the Bible. The term Homeric has been applied to those works of art, the subjects of which are drawn from scenes of this great poet.

Honour. [*honos*, Lat.] *In the mythology of the arts.* A virtue worshiped at Rome. Her first temple was erected by Scipio Africanus, and another afterwards was built by Claudius Marcellus. We find a personification of this quality on several medals of Galba and of Vitellius. She is represented half naked, holding in one hand a spear, and in the other a cornucopia: upon others, a long robe envelops the figure, and the spear is exchanged for an olive branch.

Honours. [*honos*, Lat.] *In all the arts.* Greece, in the heroic times, rendered to all her great generals and captains some liberal reward, as a proof of the public approbation and respect. This was sometimes offered in the shape of a vase of gold, or of a silver tripod, or some other valuable article either of utility or of mere ornament. Similar rewards were conceded to the victorious Roman leader in the shape of a triumph or ovation.

Nor was it to military merit alone that the ancients decreed honours: the fine arts were made objects of national regard and encouragement. Greece produced a multitude of the most eminent men—and why? because she cultivated and recompensed talent of every description. Philosophy, eloquence, painting, poetry, music, sculpture, architecture, were each enabled to aspire to the highest distinctions. The Lacedæmonians, even although their

education was decidedly warlike, erected statues to the poet Tyrtæus. At the celebrated public games in Sparta, prizes were distributed to the most successful amongst the poets and musicians. Athens erected statues to Solon, to Socrates, and an infinity of others. To Homer temples were raised; and various poets and artists received crowns, prerogatives, and often the rights of citizenship. The Athenians inscribed upon the front of their temples the names of the able architects who had designed them. The town of Pergamus purchased with the public funds a palace for the reception of the works of Apelles. The Eleans, for whom Phidias executed the statue of Jupiter Olympius, in honour for the memory of the artist, and in respect for the surpassing beauty of his work, erected, in favour of his descendants, a lucrative office, of which the only duty consisted in taking care of, and keeping free from blemish, that celebrated piece of art.

In the times of the republic, by the Romans, amongst whom the use of arms constituted the chief, nay, almost the only species of merit, few testimonies of esteem were awarded to the practisers of the fine arts. They affixed no honourable distinctions to the successful architect, painter, or sculptor, inasmuch as these peaceful avocations were, for the most part, cultivated either by slaves or freedmen. It was not until the reign of Augustus Cæsar that the arts were duly honoured.

On the revival of intellectual energy, after the darkness of the middle ages, the arts were liberally encouraged. Michel Angiolo was high in favour with the fierce Julius II. Raffaelle was greatly beloved by Leo X; and the Emperor Maximilian became the warm patron of Albert Durer, whom he ennobled. Leonardo da Vinci died in the arms of Francis I. Rubens enjoyed the highest consideration, and was entrusted with important negotiations both by Philip IV. of Spain and Charles II. of England. Even our stern Henry VIII. was a mild and kind master to Holbein; and the illustrious name of Medici will at once recall to those least read in history the zeal of that princely family for the cultivation of the fine arts.

Hood. [hoʊd, Sax.] *In costume.* An article of dress designed to cover the head and shoulders, and sometimes signifying, among the ancients, a mantle which served likewise to envelop the whole body. In this sense we find it alluded to, as serving to conceal from observation the persons of the Roman youth during their nocturnal rambles. In such a habit is usually depicted Telesphorus, the son of Esculapius.

Horizon. [ὁρίζων, bounding (a view), Gr.] *In perspective.* That great circle which divides the heavens and the earth into two equal parts or hemispheres, distinguishing the upper from the lower. The horizon is either *sensible* or *rational.* The *sensible* horizon is that circle which limits our prospect. The *rational* horizon is a great circle of the apparent celestial sphere, dividing it into two equal hemispheres, and serving as the limits of the elevation or depression of celestial objects.

The line of the horizon should be in perspective on an exact level: thus it is customary to say, a horizontal line, a horizontal surface, a horizontal plan, &c. to express the *level* of such plans, surfaces, or lines. It is of high importance to the painter that he should skilfully trace, in his work, the horizontal line. All which, in a picture, is placed above this line, is viewed by the spectator from below upwards, and all which we find below it is viewed by the eye from above downwards.

Horn. [hoɒrn, Sax.] *In archaiology.* The horns of animals, literally speaking, formed the most ancient drinking cups. Pindar, Æschylus, and Xenophon make mention of them as being appropriated to this purpose. Philip of Macedon is said to have made use of one. It is from this ancient usage that the general name of horns has been given to a species of drinking cup, as, after the actual employment of the animal substance had been discontinued, the shape remained in use. The horns of victims sacrificed to the gods were gilt, and suspended in the temples—more especially in those of Apollo and Diana. From the most remote times the altars of the heathen divinities were likewise embellished with horns, and such as fled thither to seek an asylum embraced them. It was by these excrescences that the victims, when immolated, were bound to the altar. Originally, the horns were doubtless symbolical of power and dignity, since they are the principal feature of gracefulness in some animals, and instrument of strength in others. Hence these somewhat equivocal ornaments have been frequently bestowed on pictorial representations of gods and heroes; ancient medals frequently present the figures of Serapis, of Ammon, of Bacchus, and of Isis, with these additions. The kings of Macedon were actually in the habit of wearing

the horns of a ram in their casque; and the same thing is asserted of various other princes and chieftains. See Bow.

Horn of Plenty. Amalthæa, daughter of Melissus, king of Crete, fed Jupiter with goat's milk: hence some authors have called her a goat, and have maintained that Jupiter, to reward her kindnesses, placed her in heaven as a constellation, and gave one of her horns to the nymphs who had taken care of his infant years. This horn was called the horn of plenty, or cornucopia, and from it issued fruits and flowers, and, in short, all the riches of art and nature. The cornucopia is found on an infinite number of antiques, and is the characteristic attribute of the goddess styled Εὐθυμία by the Greeks, and Abundantia by the Romans. It is placed in the hands of figures representing countries or towns, to indicate the richness of their territory; and in those of rivers, to express the fertility produced by them. The beautiful statue of the Nile, of which a copy may be seen in the palace of the Tuileries, holds a horn of plenty full of the productions of Egypt; and on the reverse of the medals of the kings of Egypt, we find two cornucopias attached together.

Horology. [ὡρολόγεῖον, a clock, Gr.] *In archaiology.* That branch of science which enables us to measure the portions of time as they pass. We judge of the lapse of time by the succession of sensible events, and the most convenient and accurate measures of its quantity are derived from motions which are either uniform or repeated at equal intervals. Of the *former* kind, the rotation of the earth on its axis is the most exact, and the situation of the earth with respect to the fixed stars, or sun, constitutes the means for determining the parts of time as they follow each other. Of the *latter* kind, the rotation of machinery, consisting of wheelwork, moved by a weight or spring, and regulated by a pendulum or balance, affords instruments of which the utility is well known. The term horology is at present confined to the principles on which the art of making clocks and watches is established. See Hydroscope and Clepsydra.

Horse. [hopp, Sax.] *In painting and sculpture.* This animal, of so vast utility to man, has been made great use of by artists, both ancient and modern. The horse was consecrated to Mars, and still more especially to Neptune, to whom, indeed, has been attributed the origin of this noble quadruped. Many princes and chieftains have been celebrated for their attachment to their horses. The Iliad affords us some idea of the estimation in which they were held during the heroic ages. The names of those horses were preserved which obtained the prizes in the courses of chariots. We find the horse constantly depicted on ancient medals and vases, and in many instances executed with great taste and skill—more particularly in those of the Thessalians, who were eminent for their knowledge of horsemanship. According to Addison, the horse, when found on these antiques, is generally placed as a symbol of the warlike disposition of the country. There are yet extant several antique statues of horses: such as the equestrian statue of Marcus Aurelius; the horses of Castor and Pollux, before the Capitol, which have been attributed to Phidias. Amongst the bronzes of Herculaneum, we find also several horses remaining belonging to statues of which the riders are lost. According to Pausanias, Herodes-Atticus, eminent for his eloquence and riches, set up in the temple of Neptune, at Corinth, a car, drawn by four horses, richly gilt. Amongst antique horses, we must not omit to mention those taken from the hippodrome of Constantinople by the Venetians, and placed to decorate St. Mark's, from whence they were removed by Napoleon to the Place Carousel at Paris (but have been since restored). It has been contended, though certainly not on the best authority, that these famous horses were executed by Lysippus, taken away from Corinth, where they had been deposited, and given to Nero by Tiridates, and afterwards transported by Constantine to Byzantium:—but all this rests on a slender foundation; in fact, their real origin is unknown, and this alone appears palpably from their style—that they belong to the period of the decline of the arts*. Many modern artists have also excelled in representing the horse. Amongst painters it is just to include those who have executed chases and battles: among statuaries, the sculptors of equestrian statues. See Elgin Marbles.

Hospital. [*hospitalis*, Lat. *hôpital*, Fr.] *In architecture.* An edifice erected and supported either at the public cost, or by the foundation and endowment of some benevolent individual, for the reception and medical treatment of unfortunate in-

* Not so the head of one of the horses of Night, among the Elgin Marbles, which bears all the marks of having been produced in the most perfect era of Grecian art.

valids whose means will not procure them sufficient care and attention at home. The name is also given to places set apart for the cure of wounded soldiers or sailors; and, more generally still, to any institution of a charitable nature; its derivative, *hospitalis*, implying hospitable, courteous, friendly to strangers.

It does not appear that these refuges for the forlorn and afflicted were common among the ancients. On the contrary, the Greeks seem to have had scarcely any institution, the purpose of which could be at all so understood. In the council-house of Athens, indeed, food seems to have been distributed to such as had suffered in defence of their country, as well as to their wives and children; but we find no traces of an asylum in case of disease. In Lacedæmonia, where, according to the legislation of Lycurgus, all the citizens fed in common, nothing similar to our hospitals existed. Nor do the other cities of Greece appear to have atoned for this defect. Among the Romans, too, the same deficiency, to a great degree, prevailed. In fact, these two people, the most refined and civilized of all antiquity, were uninfluenced by those feelings of humanity which have prompted the moderns to provide so many places of refuge for the sick and unfortunate. The chief cause of this may be found in those feelings of unmingled contempt and detestation with which the patricians regarded the plebeians and slaves, whom they looked on as the very dregs of the human race. It is however just to mention, that they had numerous buildings appropriated to the reception and festive entertainment of strangers, and that what are emphatically termed *the rights of hospitality* were observed amongst them with almost superstitious reverence.

But it was under the mild and softening spirit of Christianity, which inculcated the divine principle of common brotherhood, that institutions of the nature we are treating of sprung up profusely.

M. Durand, in his admirable work, entitled *Parallèle des Edifices de tout Genre*, has presented an interesting collection of plans of different hospitals: of such, for instance, as those of Milan, of Geneva, of Plymouth, of St. Louis at Paris, of Langres, of the Incurables at Paris, &c. &c.

The magnificence of the hospital at Milan is well deserving of attention. Its style of architecture is demigothic, and the details present several curious ornaments executed in hard clay. This edifice, built at different times, and under different architects, has never been entirely finished; but the grandeur of the court-yard, surrounded by two porticoes, one above the other, forming galleries in arcades, is very striking. The hospital at Geneva partakes of the same character, as does that of the Incurables at Paris. The hospital of St. Louis at Paris is equally remarkable for its simplicity, and for the provision by which a great body of air is allowed to play round that portion of the edifice devoted to contagious disorders.

A little before the French revolution, several of the most eminent medical men were consulted as to the best distribution of the various parts of an hospital, in order to meet the double purpose of salubrity and convenience. A building was commenced at La Roquette, in 1788, under the designs of M. Poyet; by the construction of which it appears that among the things prescribed was an entire isolation of each of the wards, together with a facile communication, by means of covered galleries along all the circumference of the court-yard; which galleries would afford to convalescents the benefit of taking the air. The hospital at Plymouth, erected in 1756, possesses similar advantages under another form, and on a smaller plan. Greenwich Hospital is the most noble in Europe. Its fine situation on the banks of the Thames, its easy distance from London, and its aspect, that of a majestic palace, offer to the brave seamen whose energies have been spent in the service of their country all the consolations which declining age can require, or that state of mutilation, from honourable wounds, which may render them unfit again to encounter the dangers of war.

Hotel. [Fr.] *In architecture.* A large inn, or place of public reception and entertainment for people of rank and distinction.

Hourglass. [*hora*, hour, Lat. and ȝlæs, glass, Sax.] *In ancient sculpture.* In an antique basso-rilievo representing the nuptials of Thetis and Peleus, published by Winckelmann in his *Monumenti Inediti*, we find Morpheus holding in his left hand an hourglass, similar in shape to those still in use.

House. [huſ, Sax.] See Architecture.

Hut. [hutte, Sax. a poor cottage.] See Architecture, Cottage.

Hyacinth. [ὑάκινθος, Gr. *hyacinthus*, Lat.] *In gem sculpture.* A genus of transparent gems, of a red colour with an intermixture of yellow. The hyacinth is of various sizes, from that of a pin's head to

the third of an inch in diameter. It is found in the East and West Indies, and in Bohemia and Silesia.

HYDRA. [ὕδρα, Gr.] *In archaiology.* A celebrated monster which infested the neighbourhood of the lake Lerna in Peloponnesus. It was the fruit of Echidna's union with Typhon. It had a hundred heads, according to Diodorus: but accounts vary much on this point, and no wonder; since, as soon as one of these heads was cut off, two immediately grew up, unless the wound was stopped by fire. It was one of the labours of Hercules to destroy this monster, which he easily effected with the assistance of Iolas, who applied burning iron to the wounds as soon as each head was cut off.

The ancient artists differ in their representations of the hydra. Sometimes it is a serpent branched out into several others; and sometimes has a human head, with serpents upon it instead of hair, and descending less and less in serpentine folds.

HYDRAULICS. [ὕδωρ, water, and αὐλὸς, a pipe, Gr.] *In architecture.* The science of measuring, conducting, and raising water. Hydraulic architecture is that which relates to the construction of harbours, bridges, dykes, fountains, quays, navigable canals, &c. The necessity that an architect should be in some degree acquainted with this science is obvious, that he may be enabled, with intelligence and precision, to undertake and carry on such works as we have enumerated: and even that he may be enabled to conduct water with facility into public or private edifices. See ARCHITECTURE.

HYDRAULOS. [ὕδωρ, water, and αὐλὸς, a pipe, Gr.] *In hydraulics.* A pneumatic engine used in ancient times, of which Ctesibius, a celebrated merchant of Alexandria, has been reported the author. Antiquaries have puzzled themselves greatly as to the peculiar form and construction of this instrument: a point which they are by no means likely to attain a decisive knowledge of, and which knowledge, could it be obtained, would be now of little or no utility.

HYDROPHANE. [ὕδωρ, water, φανὴς, lucid, Gr.] *In gem sculpture.* This stone, so called from its transparency being lost or becoming visible on plunging it into water, was not unknown to the ancient engravers. Winckelmann, who wrote in an age when the study of mineralogy had not made much progress, speaks of this phenomenon, but offers no kind of explanation. "Upon a sardonyx of three colours," says he, "I found a figure of Apollo standing, with a star before him; the under stratum of this stone, which was white, became black, on putting the ring on my finger, and, on removing it, resumed gradually its whiteness." This phenomenon was probably owing to the perspiration having deprived the gem of its brilliancy, which it regained by degrees as it became dry. Some specimens of these stones have been said to gain transparency, instead of losing it, on the application of water.

HYDROPHORE. [ὕδωρ, water, and φορος, bearing, Gr.] *In the archaiology of sculpture.* A little bronze statue which Themistocles erected out of the fines which he levied on certain individuals whom he had condemned for turning the public streams into private canals. He had it consecrated in a temple. The same figure was subsequently discovered at Sardis, in the temple of Cybele. By this name are frequently designated those small figures in cabinets which bear a vase to hold water.

HYDROSCOPE. [ὕδωρ, water, and σκόπος, a mark, Gr.] *In the geometry of art.* An instrument anciently used for the mensuration of time. The hydroscope was a kind of water-clock, consisting of a cylindrical tube, conical at the bottom: the cylinder was graduated, or marked with divisions; and as the surface of the water, which trickled out at the point of the cone, successively sank to those several divisions, it pointed out the hour. See CLEPSYDRA.

HYENA. [*hyæna*, Lat.] *In mythological painting and sculpture.* In the year 1006 of Rome, at the secular games given by the Emperor Philip, and which lasted six days, there appeared a hyena, an animal until that time unknown in Europe. It was struck on that occasion upon several medals, though not very successfully. In one described by Spanheim, he states it to be represented with the head of a dog, ears short and triangular, the head and feet of a lion, and the skin of a tiger. According to the same author, it is a hyena which appears on the reverse of several medals of the Emperor Gallienus, bearing this inscription:

LIBERO P. CONS. AUG.

but it might rather be suspected to be a panther, an animal consecrated to Liber Pater—that is to say, to Bacchus.

HYPÆTHRAL. [ὑπὸ, below, and αἰθὴρ, air, Gr.] *In ancient architecture.* Uncovered or open to the sky; according to Vitruvius, the seventh order of temples, and without a roof. The temples known under this name had six columns before each front, and were surrounded by a double

portico. The chapel of these temples was mostly roofless, otherwise its extent would have rendered it too gloomy, as the light of day could only have been admitted through the outer door. However, for the statue of the patron deity, and those who had business within, and required shelter in bad weather, they constructed around the interior, a portico consisting of two ranges of columns one above the other. There remain to the present day several antique temples of this kind, answering more or less to the description given by Vitruvius. Such is the grand temple of Pœstum, represented in the works of Paoli and Delagardette *on the Ruins of Pœstum*: the temple of Jupiter Olympius at Athens, represented by Stuart in the *Antiquities of Athens;* that of Selinus, in Sicily, represented by Houel, in his *Voyage in Sicily;* that of Minerva at Athens, given by Stuart; and that of Jupiter Panhellenius, in the isle of Ægina, given in the *Ionian Antiquities.* Of all these temples, that of Pœstum is the only one which yet retains its interior portico. See ARCHITECTURE, CELLA.

HYPERBOLA. [ὑπὲρ, over, and βάλλω, to throw, Gr.] *In architecture.* A term for one of the sections of a cone.

HYPOCAUSTUM. [Lat. Ὑπόκαυστον, a stove, Gr.] *In architecture.* An arched chamber in which a fire is kindled for the purpose of giving heat to the rooms above it. The heat is conducted from the hypocaustum by means of tubes, which are carried through every chamber, thus affording a pleasant and equalized warmth. This method was first adopted in baths, and afterwards became used in private houses. It does not appear to have been known among the Romans until, at least, the time of the Emperors. The advantages of this method are that it affords a uniform temperature and is free from smoke; the degree of warmth is regulated by the addition of valves. After all, however, there appears to us to be something far more cheerful about the blaze of a common coal fire.

These tubes for the conveyance of heat are sometimes enclosed in the walls of a room, and are continued to that above, so that the same pipe serves for both. In other instances, the hypocaustum itself has been placed at the side of the apartment for the use of which it is designed, and an aperture made, capable of being shut at pleasure, through which the warmth proceeds. Winckelmann gives the following description of a hypocaustum found among the ruins of Tusculum, under several chambers. "Beneath the rooms," says he, "were little underground cells, of about the height of a table—two under each apartment. They had no entrance. The cieling of these small cells was constructed of large flat bricks, and supported by two pillars alike constructed of brick without lime, but with loam only, in order that the heat may have no injurious effect on them. Through the cieling ran quadrangular pipes made of loam, which descended half-way down the little cell, and the upper extremity of which terminated in the chamber above. Similar pipes were carried from this through the walls into the second story of the building. The extremity of these tubes was often decorated with a lion's head in hard clay. These subterraneous cells were approached by a corridor two feet wide, and the coals were introduced into them through a square opening."

HYPOSCENIUM. [ὑπὸ, under, and σκηνὴ, a scene, Gr.] *In architecture.* This name, which signifies *under the scene* or *back scene,* is given by Pollux to the front wall of a theatre which faces the orchestra from the stage. It was usual to decorate it with columns and statues. This obtained among the Romans, as appears by the hyposcenium of the proscenium of the theatre at Herculaneum, which exhibits niches wherein there can be no doubt statues were formerly placed. Vitruvius makes no mention of this term.

HYPOTRACHELION. [Gr.] *In architecture.* According to Vitruvius, the slenderest part of the shaft of a column, that which joins the capital, and which we call the frieze or necking.

I

IBIS. [ἶβις, Gr.] *In mythological painting and sculpture.* The ancient Egyptians worshiped this bird; they set it up in the sanctuary of their temples; they suffered it to stray freely and unharmed about their cities, they embalmed it with equal care to that bestowed on their dearest relatives; they attributed to it a virgin purity, and an inviolable attachment to their country, of which it was an emblem. In fine, they felt assured that the gods assumed the shape of the ibis whenever they found it necessary to visit earth. Although the ancients have left us several admirable

descriptions and representations of the ibis; the intelligent French naturalist, M. Cuvier, and our countryman, Bruce, whose accounts, by the by, although at first considered almost wholly fabulous, are continually receiving fresh confirmation, are the only modern authors who have made any satisfactory allusion to this bird, the name of which appears to have been improperly given by many naturalists to those of another genus.

The testimony of the ancients, and the works of art on which the figure of the ibis is engraven, accord equally with the observations of M. Cuvier. Herodotus states the following particulars respecting the commonest species of this bird:—the head and neck bare, the plumage, with some exceptions, white: others, however, were represented as entirely black, with feet like the crane, and crooked beak.

The paintings at Herculaneum, and the Palestrine Mosaic, both present a number of figures of the ibis, all agreeing in the essential characteristics assigned by the ancients: to which we may add a medal in bronze, and another in silver, of the Emperor Hadrian, each bearing a similar representation. According to Bruce, this bird is still to be found, and not unfrequently, upon the banks of the Nile.

Icehouse. *In architecture.* An apartment or cellar underground, constructed for the purpose of preserving ice in its frozen state during the summer months. Our readers are of course well aware of the many luxurious preparations which result from this practice.

Ichneumon. [ἰχνεύμων, Gr.] *In the archaiology of sculpture.* A quadruped about the size of a cat, covered with long hair like a wolf: it has the snout of a hog, and a tail long and thick, growing close to its body. This animal is found in abundance in Egypt, haunting the towns and gardens during winter, but in summer taking to the open country. Its favourite food is crocodile's eggs, for which animal it seems to cherish an hereditary hatred, which attracted the observation of the ancients, and is alluded to by them. Aristotle and Oppian go largely also into the detail of its combat with the asp, which however it does not seem fond of attacking without having first summoned several other ichneumons to its aid, a circumstance which is represented on the Palestrine Mosaic. On the base of the statue of the Nile is depicted a conflict between the ichneumon and crocodile. It was pretended by Ælian that this animal is at once male and female and other ancient writers fabled that, in the conflict last mentioned, the ichneumon darted down the crocodile's throat, and fairly nibbled away at its entrails. All these stories are without foundation. The French have designated this little quadruped *Pharaoh's rat*, and the name has been adopted by Prosper Alpin.

The name of Ichneumon has also been applied to a genus of insects of the hymenoptera order.

Ichnography. [ἰχνογραφία, engraving of a vestige, Gr.] *In architecture.* The plan or outline upon the ground of an intended building. This word is not used by painters or sculptors, but is adopted by those artists who confine themselves to designing. In perspective, it is the view or representation of any object whatever intersected by a horizontal line at its base or ground-floor.

In architecture, this word signifies the transverse section of a building, which represents the circumference of the whole edifice; the different apartments; the thickness of the walls; the distribution of parts; the dimensions of doors, windows, chimneys; the projection of columns and door-posts; and, in short, all that can come into view in such a section.

Ichnopoios. [Gr.] *In sculpture.* A maker of figures. See Modeller, Plastic.

Ichthys. [Gr.] *In sculpture.* A fish. Buonarotti, in his Osservazioni sopra Framm. di Vasi di Vetro, speaks of a fragment of glass representing a young man holding a live fish, in allusion, say the critics, to young Tobias. This representation of a man and fish had certainly a mystical allusion in the minds of the early Christians, and became to them a sacred symbol, by which was sometimes understood their divine Founder. They were also in the habit of engraving the word *ichthys* upon their seals and rings, upon their lamps, tombs, and sepulchral urns, accompanied by the representation of a fish. Buonarotti has also published in the same work, an inscription in the form of an acrostic, and of which, consequently, each letter of the Greek word ΙΧΘΥΣ commences a line. These five letters separately form the Greek word Ἰησοῦς Χριστὸς Θεοῦ Υἱὸς Σωτήρ;—that is to say, Jesus Christus Dei Filius, Salvator.

Icon. [Lat.] See Eikon.

Iconology. [εἰκών, image, and λόγος, a word, Gr.] The doctrine of picture or emblematical representation; a description of pictures and statues.

Ideal. [ἰδέα, Gr.] *In all the arts.* Mental, intellectual, not perceived by the senses. With regard to art, the ideal, in

like manner, refers to any thing which has its origin wholly in the imagination, or which, adopting a real person or natural object, invests it with all kinds of attributes, such as the impartiality of nature never lavishes on any individual subject. It will appear obvious that much caution, and no small degree of fancy, are requisite in pursuing this difficult department of art.

IDEAL BEAUTY. See BEAUTY, CHARACTER, COMPOSITION, DRAWING.

IMAGES. [*imago*, Lat.] *In sculpture.* This word was used, among the ancients, more particularly to denominate the portraits of their ancestors, either in painting or sculpture. The Greeks and Romans entertained for these images the greatest veneration, and even rendered them a sort of worship. The Romans preserved with especial care the images of their ancestors, and had them carried both in their funeral pomps and in their triumphs. This honour, however, was restricted to figures of such as had held important offices in the state; as, for instance, those of ædile, prætor, or consul. These images were often made of wax, sometimes of marble, and were occasionally adorned with pearls. But extravagance, in this particular, did not become general until the era of the emperors. The atrium or porch of those families who had for a long time held the principal magistracies, were filled with an infinite number of these images. They became smoke-dried, in course of time, by the fire which was always kept lighted in the atrium, in honour of the lares, or household gods. In order to prevent this, they were sometimes deposited in the chests or presses. On days of solemnity or rejoicing, they drew these statues forth, crowned them with laurel, or decked them with the habits which characterized the public offices of the parties whom they depicted. According to Polybius, the toga was invariably put upon these images, but of various kinds: that called *pretexta* upon those who had been consuls or prætors; the toga bordered with purple, on former censors; and those embroidered with gold upon the statues of such as had been decreed a triumph. The slaves, designated atrienses, had the charge of keeping these images in order, of preparing them for public days, and of carrying them in funeral ceremonies of any member of the family to which they belonged. In these processions, the images in question were usually placed upon little couches, and sometimes fixed upon poles. If, however, a man's memory became obnoxious, they did not scruple to deface or destroy his image, or, at least, suffered it not to take a share in any public ceremony. The images of the emperors, with their names affixed thereto, and attached to military emblems, were raised solemnly in the most public places; but even these were subjected to the ever-changing opinion of the populace, who, if they wished to shake off the yoke of the reigning sovereign, hesitated not to break his statue, drag it through the mire, or throw it into the Tiber.

The ancients were likewise habituated to engrave upon their rings the images of their friends, with which they also ornamented their cups or vases. The disciples of Epicurus did not content themselves with depositing the image of their master in their inner or sleeping apartments, where they rendered it a species of worship, but bore it, in like manner, on their rings, and had it engraven on their vases. The Roman emperor Claudius permitted not his subjects indiscriminately to wear his figure on their rings, but those alone who had made public entry of them—thus, in fact, forming a kind of tax thereon. Vespasian abolished this ungracious distinction, which served as a cue for the exertions of many public informers, a species of reptile which existed in those days as well as the present. Under Tiberius it was considered a capital crime to carry into houses of prostitution, or places of undignified retirement, the image of the emperor engraven on a ring.

It was also customary, among the ancients, to place at the stern of a vessel the images of certain deities or animals, which thence acquired the title of *tutelæ navis*, the guardians of the ship. Another custom was to set up, both in public and private libraries, the images or busts of the most celebrated writers. Both Greeks and Romans offered in the temples of their gods not only images of themselves, but of other personages also. Thus Diogenes Laertius informs us, that Mithridates, son of Rodobates, dedicated to the Muses the statue of Plato. According to another ancient author, Romulus dedicated to Vulcan certain chariots of gold, together with his own statue; and we read in Tacitus, that Julia dedicated to Augustus the image of Marcellus.

Since the introduction of Christianity, the use, and even the worship of images has, together with several other pagan institutions, been preserved. Among the sectaries of the Greek church, more particularly, the practice of this kind of idolatry is perpetuated: but with them, the

image does not consist of a sculptured figure, but a painted one, and this painting often executed in the worst and most barbarous style of art, although frequently richly adorned. They had a custom of surrounding the heads of their images with a glory, in relief, the substance of which was either gold, silver, or copper gilt, according to the fortune of the proprietor. These paintings were chiefly *done* upon wood, in conformity with a Greek superstition against the pictorial use, in this way, of canvass.

The term images amongst us has descended to a very undignified signification indeed; for we principally understand by it those little unpretending plaster figures, a stand of which is often seen in the streets of London or Paris, to decorate the head of a poor wandering Italian, and which are offered, at little or no cost, for the amusement, or, in Catholic countries, for the devotion of the people.

IMITATION. [*imitatio*, Lat.] *In all the arts.* We say, that a man imitates when either his ideas or actions are not properly of his own origin, but are reflected from those of any other individual; and this may take place in a variety of ways: the child imitates those around him, in manner, and language, and way of thinking. His imitation, in fact, reduces itself to mimicry, for he has no power of reasoning on the strength or weakness of the motives which lead to what he sees done: no faculty of judgment by which he may be enabled to discriminate between proper and improper modes of expression: no experience to teach him the danger of indulging such or such modes of thought. He feels himself subjected to certain wants and desires, and he is urged by these to acquire the method of expressing them, in order that they may be administered to; besides which, the strong principle of emulation and thirst for knowledge impel him almost blindly onward in the course we have adverted to. But as the child casts off his puerility, and advances towards manhood—as his intellect expands, and he acquires the faculty not only of observation but also of comparing and analyzing that which he observes, the headlong principle of imitation is thrown aside as unworthy of a thinking creature; and such things only are adopted as appear to deserve to be so by the weighing and reflecting power of reason.

> Thus of the child a boy, the boy a man,
> Eager to run the race his fathers ran.

It is therefore sufficiently obvious, that a servile copy of the actions or opinions of another man—whether adopted blindly and without being impressed with a sense of the wisdom, virtue, or talent of the person copied; or, on the other hand, whether the choice of a model has proceeded from reflection, and a deep conviction of the worthiness of such individual, but without having regard to difference of circumstance requiring various modifications—is alike degrading to the judgment and ability of the copyist.

There is, however, a species of imitation which is praiseworthy and honourable—it is that which is usually expressed by the word *free*. In this case, the copyist selects and adopts his model, but sets himself seriously to discover in what points his own work deviates from the nature of that he has placed before him; he exercises the same judgment, by aid of which he had formed his selection, in discarding such particulars as do not seem to harmonize with the whole: if he is endeavouring to imitate the benignity and virtue of some good man, he weighs well his own means, together with the shades of difference, whether constitutional or habitual, that discriminate their characters: if he is following in the course of some eminent artist, he is careful not to be seduced into errors by the brilliancy of a great name, nor to forfeit his own inherent right of opinion and imagination. Thus a work conducted on similar principles to any preceding one, may deserve a far better reputation than that of mere imitation: it may, indeed, by a thoughtful and intelligent execution of its different parts, almost merit the praise of originality. It was thus that Plautus and Terence imitated the Greek comedy.

Having made these general observations on the principles of imitation, we will, in few words, apply what has been said more especially to the fine arts.

According to some critics, *all* is here imitation. The fine arts, say they, are born of imitation. In imitation of nature consists their very essence, and they please or offend but as this is true or untrue. In this opinion, there is much truth and some error.

It is true, that the works of the painter or sculptor give pleasure by their lively resemblance to what is natural and real: but, as we have observed before, it is true in a modified sense. Were this otherwise, the performances of Gerard Dow, of Teniers, and other masters of the Dutch school, would be far more excellent and admirable than those of Raffaelle, of Mi-

chel Angiolo, and the other great names that throw lustre over the history of Italian art: but, in point of fact, it is the splendour of imagination, the creative and not the mere imitative power, that has affixed to these immortal works the surpassing fame which they have had, have, and will still continue to possess.

If the painter or sculptor should employ himself only in making close copies of the different objects of a pleasing kind which surround him in nature, and if his success were to be estimated simply in proportion as these resemblances were exact, he would be degraded into the character of a mere draftsman. There are a multiplicity of objects agreeable in nature which are not at all calculated for introduction into a work of art, in the same way as many colloquial phrases, quite proper and even happy in conversation, are unfitted to the gracefulness of poetry or dignity of eloquence. It is the selection, the combination, the fancy displayed—it is these things, *added to a just eye for verisimilitude*, that constitute the artist's greatest success, and characterize his highest achievements.

We have already, under the head of ARCHITECTURE, enlarged upon this subject, and endeavoured to trace out the difference between free and servile imitation. Let not the young artist hesitate to mould his style on that of some eminent predecessor; or rather let him strive to collect from the works of each of the great masters in art, the peculiar charm by which he was rendered conspicuous, and blend them, so far as may be consistent and harmonious, in his own compositions. Let him remember that *this* kind of imitation has been recommended and adopted by the most illustrious names; and that even Raffaelle himself was indebted, for the main design of his two majestic figures of St. Paul—namely, the one preaching at Athens, and the other punishing Elymas the magician, to Massaccio, a preceding painter.

Before we close this important subject, we would take occasion to refer the student to the following works:—*Considérations ur la Peinture*, by C. L. de Hagedorn; the *Discourses* of Sir Joshua Reynolds; the excellent articles of Wattelet, in the *Dictionnaire de Peinture;* Sulzer, in the *Théorie des Beaux Arts*, at the word *Nachahmung;* and Lanzi, in his *Storia Pittorica.*

IMITATORS. *In all the arts.* It is curious to observe with what extraordinary felicity certain individuals have seized the style and manner, not only of their own masters, but, in numerous instances, of artists who lived in preceding ages. This has given rise, not unfrequently, to ludicrous mistakes. Men have been affirmed to have been the personal pupils of such or such a master, who were born only just before, or even after his death.

The faculty of imitation to this extent must be considered a dangerous one; inasmuch as it is calculated to lead the possessor out of the walk prescribed by his own intellect and ability. See the preceding article.

IMPASSIONED. *In all the arts.* See STYLE.

IMPASTATION. [*in* and *paste.*] *In sculpture.* A mixture of several matters, such as various colours or other different things united together by some cement or mastic, which will endure exposition either to the air or fire: such are works in earthenware, porcelain, imitation of marble, &c.

IMPERIAL. [*impérial*, Fr.] *In architecture.* A kind of roof or dome which, viewed in its profile, is pointed towards the top, and widens itself more and more in descending towards its base.

IMPERIAL MEDALS. *In sculpture.* This name is applied specifically in art to those struck after the conclusion of the Roman republican era, and until the fall of the Eastern empire.

Many authors have furnished us with accounts of these imperial medals. Among the most useful for reference, are Patin, Vaillant, Banduri, Morell, Eckhel, and Tanini; all of whom agreed in considering them merely as relative to history. Among this description of medals, we find the greatest number of gold or some other precious substance.

Caius Julius Cæsar was the first Roman who obtained permission to put his figure upon medals, but all which bear his name or head are not of his time: Trajan, in order to show his respect for the memory of this great man, had a great number of them repaired or restored.

Upon the earliest of the medals bearing the name of Cæsar, we find the pious Æneas, from whom the family of Julius pretended to have sprung; the elephant crushing a serpent, in allusion to the name of Cæsar, which in Phœnician signifies elephant; Venus, Pallas, and Victory—emblems of sovereign power. The head of Cæsar did not begin to appear on them until the year 45 B. C. or that of Rome, 709. It was Julius Cæsar who introduced the chaplet of laurel, to cover his head, which was bald. His titles were—Divus Julius, Consul, Dictator, Imperator, Parens Patriæ, Pontifex Maximus, Augus-

tus. The comet, which is said to have appeared after his death and to have denoted his admission into Olympius, is found only in his restored medals.

The medals of Marcus Junius Brutus present us the head bearded, wearing an oak crown, emblem of liberty; we see him, on others, marching, preceded and followed by lictors, and having before him his accensus, or proclaimer: on others again, the reverse presents the cap of liberty, between two daggers, with the inscription, EID. MAR. indicatory of the Ides of March, the day on which Cæsar fell by the steel of Brutus. A representation of Liberty is accompanied by this inscription: LIBERTAS P. R. RESTITUTA—Liberty restored to the Roman people. Brutus is not the only one among Cæsar's assassins whose name and head were engraven on medals. Cassius had his also. We find on these a female figure surrounded by a glory, with the word Libertas. The sons of Pompey had, in order to avenge their father, stirred up commotion in Spain, but Octavius Cæsar subdued them. There remains to us but one medal of Cneius Pompeius, on which we perceive a figure of Spain in the act of receiving him. Sextus caused many to be struck after the peace which he concluded with Antony and Octavius, who abandoned to him Sardinia, Sicily, and Corsica, with the title of *Præfectus classis et oræ maritimæ*, which he assumed upon his coins. He also placed thereon, with filial piety, the head of the great Pompey, his father.

The triumvirs had each his set of medals. Those of Lepidus present us with his figure, and on the reverse, those of his two colleagues, or, in other instances, the various attributes of imperial sovereignty. The medals of Mark Antony are much more plentiful than those of Lepidus; they bear the title of Imperator, the emblems of dominion, and the initials R. P. C. to indicate that the triumviri had assumed supreme authority only in order to restore the republic. On these medals, as may be supposed, the figure of the beautiful Egyptian, Cleopatra, is not wanting, and it is frequently accompanied by the title of *Queen of Kings*, or *Mother of Kings*. Many of Antony's coins bear the name of different legions, and of their chiefs: some, also, are ornamented with a mystic cistus, and a crown of ivy, inasmuch as this once powerful chief affected greatly to be known by the name of Bacchus. The medals of Octavius Cæsar are still more numerous than those of Antony; and it is with him commences the history of the Roman emperors. On the earliest specimens we read the appellation of Triumvir; but soon after he appears to have assumed those of Caius, Cæsar, Augustus, Imperator, Pontifex Maximus, Divi Filius, Pater Patriæ. His head is encircled with a laurel crown, and among the most curious reverses on his medals we find the following:—the temple of Janus shut; the civic crown between the talons of the Roman eagle; this prince in a chariot upon a triumphal arch; a crocodile, with the inscription, *Ægypto capta*, indicating the defeat of Antony and Cleopatra; the Parthians replacing the Roman eagles; the capricorn, sign under which Augustus was born; the head of Julia, his daughter, between those of Caius and Lucius Cæsar, his sons; the construction of the public roads; his equestrian statue. The medals struck after the death and apotheosis of Augustus bear the title of Divus Augustus. The head radiated is the sign of his deification; it is sometimes accompanied by a thunderbolt or a star. The coins of Augustus Cæsar have been restored by several succeeding emperors, who also struck medals of themselves.

With Constantine commences the series of medals of the emperors of the East, or of Constantinople. Ducange has given a description of them, but not in a very exact manner. Constantine has the head casqued, or surrounded by a glory. He bears a pike and shield, a sceptre adorned with gems, and sometimes in his right hand a globe surmounted by a figure of Victory. He has occasionally the head veiled. Ducange and Banduri have engraved his medals, and those of his family. The figure is often found holding the labarum, or imperial standard, which bears the monogram of Christ, and this motto, *hoc signo victor eris*. Julian, surnamed the Apostate, has a tufted beard, to affect the costume of the philosophers: the head of Jupiter Serapis adorns the reverse of several of this emperor's coins. Under the reigns of Valentinian and his successors, symbols referring to Christianity became very frequent. On the medals of Justinian the younger, Christ is depicted giving his benediction; and upon those of Constantine Duca, the emperor is represented in the act of being crowned by God himself. The series of imperial medals concludes with those of Michael IX.

IMPLUVIUM. [Lat.] *In ancient architecture.* This term denoted, in the houses of the ancient Romans, a place in the middle of the court-yard, which, not being co-

vered, was consequently exposed to all the varieties of the weather. The size of the impluvium was never less than a quarter or larger than a third of the dimensions of the atrium, or court-yard itself. Sometimes, in the ardent heats of summer, they drew over the impluvium a kind of veil, or awning, under which they were enabled to remain without being incommoded by the rays of the sun.

Impost. [from *impono*, Lat. to lay on.] *In architecture.* A facia or small cornice which surmounts a pier or pilaster, and serves as a base for the construction of an arch. This layer of stone is shaped into different mouldings, according to the several orders of architecture. See Architecture.

Impression. [*impressio*, Lat.] *In all the arts.* This word is used to designate the sensation excited in the mind of the spectator by any work of art.

In painting it means each coat or stratum of colour laid on the canvass or other surface, to prepare it to receive finally the colours proper to each object intended to be delineated. It is also sometimes applied to that species of painting, of a single colour, used upon the wall or wainscoting of an apartment for the purpose of decoration; upon timber or joiner's work, to preserve it from humidity; and upon the works of the locksmith, to keep them from rust.

The word impression is likewise applied to a copy of an engraving or woodcut, or to the whole number printed at one time of a book.

Inauguration. [Fr.] *In the history of the arts.* The ceremony which takes place at Rome when either the pope himself, one of the cardinals, or indeed any of the high dignitaries of religion enter on their offices. It is, in fact, a kind of consecration.

This word, used more generally, applies to the coronation of sovereigns or any investiture whatever by solemn rites.

The original meaning of the term inauguration appears to have been the consultation of the gods by the flight of a bird.

Incertum. [Lat.] *In architecture.* Vitruvius designed by this word a manner of construction which consisted in making use of small rough stones, cemented together by mortar. Chandler, in his Voyage in Greece and Lesser Asia, is deceived in applying the term incertum to walls built of hexagonal and pentagonal stones constructed without mortar.

Inch. [Sax. ince.] *In architecture.* A measure of length supposed equal to three grains of barley laid end to end: the twelfth part of a foot.

Incrustation. [Fr.] *In architecture and sculpture.* Any work of architecture or sculpture, of whatsoever substance it may be, which is fixed either with mortar, with mastic, or cramp-irons, into notches made to receive it: such are inlaid work, mosaics, &c. The ancients often executed these incrustations. Many Egyptian figures have the eyes incrusted. The figures of the Isiac table exhibited in the *Cabinet des Antiques* of the National Library at Paris are for the most part incrusted in silver: some are inlaid upon copper by a particular process.

India Ink. *In drawing.* A preparation manufactured in China and other parts of Asia, and there used in writing. In Europe, this ink is employed in shadowing drawings. By appropriate experiments Dr. Lewis has shown that this substance is composed of fine lampblack and animal glue.

India Rubber, or Elastic Resin. *In drawing.* A substance produced from the *syringa* tree of Cayenne and other parts of South America. It oozes, in a milky form, from incisions made in the tree; and is chiefly gathered in time of rain, because it then flows in peculiar abundance. It is said to acquire the consistence in which it is seen in other countries merely by exposure to the air. The Americans use it to make boots, which are impenetrable to water; and bottles, which they fasten to the end of reeds. They also convert it into flambeaux, an inch and a half in diameter, and two feet long, which afford a brilliant light, and burn twelve hours. A kind of cloth is farther prepared from it, which supplies, to the inhabitants of Quito, the place of the oiled or tarred cloths of Europe. By means of moulds of clay, it is made into various useful and ornamental figures. This process is commenced by spreading it, while yet in a clammy state, over the moulds, in successive layers, till the desired thickness is attained. The figure is then exposed to the smoke of burning vegetables, which gives it a blackness of colour. Before it is perfectly hardened, it is also capable of receiving those impressions on the outer side which are commonly seen.

We need not enlarge on the obvious use of this substance in the offices of the painter or architect.

Indian Architecture. See Architecture.

Indigo. [Lat. *indicum.*] *In painting.* A drug of a dark blue colour prepared from

the leaves and small branches of a low shrub indigenous to the warmer parts of Asia and Africa, and now cultivated in those of America.

INDIVIDUAL. [*individuel*, Fr.] *In all the arts.* That which is proper or peculiar to any one object or person; to depict which, for instance, is the purpose of portrait-painting or miniature.

INDULGENCE. [*indulgentia*, Lat.] *In sculpture.* A medal of the emperor Severus represents this virtue under the emblem of Cybele, tower-crowned and seated upon a lion; in her left hand she has a pike, in her right a thunderbolt. The lion was regarded among the ancients as symbolical of indulgence or clemency.

Upon a medal of Gallianus, indulgence is designated by a female seated, who stretches forth her right hand and holds a sceptre in the left;—on another, she is represented walking, having a flower in her right hand, while with the left she spreads out her robe, to shelter criminals under it.

INITIAL. [Fr. *initium*, Lat.] *In sculpture and engraving.* The incipient or commencing letter of any proper name or other word. See ABBREVIATION, INSCRIPTION.

INLAYING. See CRUSTA, EMBLEMATA, INCRUSTATION.

INSCRIPTION. [Fr. *inscriptio*, Lat.] *In sculpture, painting, and engraving.* This word denotes a brief and comprehensive sentence by which any particular or memorable event is recorded upon some monument raised for the purpose, and it also frequently serves to hand down the name of the author or proprietor of any work of art, together with the object for which it may have been designed.

This term is synonymous to that to which the Greeks applied the word ἐπίγραμμα, from ἐπί, under, and γραμμα, a writing. The Latin word *inscriptio* has precisely the same derivation—*in* under, and *scribere* to write.

The inscriptions which, on pillars, or other monumental edifices, are destined to transmit to posterity the memory of some interesting event are generally engraved upon marble or bronze. In very remote times, however, they contented themselves with merely setting up a rude stone, or heap of stones, to commemorate the act or circumstance which they were desirous of recording. We read in Genesis that when Jacob and Laban were reconciled, the former erected a stone, to serve as the testimony of this reconciliation. It was customary, also, in remote ages, to plant one or more trees to answer a similar end, and in Palestine, instances are known of such trees being replanted at different times, thus preserving, through a long series of years, the remembrance of the event in honour of which the sylvan testimony had been originated. After the invention of written characters, it soon became habitual to add their more certain and lasting assistance to the traditional record of the intent of these piles, and the custom is found to have prevailed amongst the Phœnicians, the Egyptians, the Persians, and indeed all the nations of antiquity. Thus, according to Thucydides, the citadel of Athens comprised columns on which were recorded the injustice of those tyrants who had usurped sovereign authority. Herodotus informs us that, by the decree of Amphictyon, a pile of stones was erected, bearing an inscription in honour of those who fell at Thermopylæ. In course of time, the Greeks, and other ancient nations, inscribed on their columns and tables both religious and civil laws; from this practice, however, the Lacedæmonians were exempt, who were forbidden by Lycurgus to adopt it, he being desirous to constrain them to learn his institutions by heart. At length, even the history of the country, the ceremonies of worship, principles of science, treaties of peace, declarations of war, &c. were all engraved either upon marble, ivory, stone, or other substance.

This is, however, clearly not the meaning to which we now limit the term inscription, which, as at first observed, indicates an expression either briefly explanatory or epigrammatic. It will hence appear that much difficulty is often experienced in forming such as combine the necessary requisites. The ancients were often very happy in practising this art. They knew how to render a few words striking and expressive. Energy and perspicuity are the points mainly to be desired, and those artists or authors who propose to acquire this accomplishment would do well to study the terseness of the elegant Greeks and strenuous Romans.

There are several modern inscriptions which may be cited that possess this force and precision. That on the Hotel of Invalids at Berlin, LÆSO ET INVICTO MILITI (To the warrior wounded and not conquered), is an instance; as is likewise that on the statue of Peter the First at Petersburgh, which has a simplicity very similar to that of the ancients:—PETRO I. CATHARINA II. (Catharine the Second to Peter the First.) This daring inscription was dictated by M. Falconet, who formed the statue. This kind of style must, at

the same time, be cautiously dealt with. Such an inscription as the last would be perfectly ridiculous if applied to any other than the most distinguished personages. We must not forget, also, to notice the inscription to the memory of our great architect, Sir Christopher Wren, in St. Paul's.

SUBTUS CONDITUR
HUJUS ECCLESIÆ ET URBIS CONDITOR
CHRISTOPHORUS WREN,
QUI VIXIT ANNOS ULTRA NONAGINTA,
NON SIBI SED BONO PUBLICO.
LECTOR, SI MONUMENTUM REQUIRIS,
CIRCUMSPICE.

(Underneath lies buried Christopher Wren, the builder of this church and city, who lived upwards of ninety years, not for himself, but for his country.—Reader, if thou seekest his monument, look around thee!)

It will be obvious that the Greek and Latin languages are peculiarly fitted, from their construction, for the purposes we are treating of: they have, however, one great counterbalancing disadvantage:—the principal object, namely, that of perpetuating any person or event in the popular mind, is very unlikely to be gained by enveloping the inscription in the veil of a foreign tongue.

Although inscriptions have been placed on paintings as well as on edifices and statues, on ivory, bronze, or marble, the art of composing them has received the denomination of the *lapidary style*, inasmuch as stone (in Latin, *lapis*,) is the substance on which they have been most generally used.

Many authors have published works professing to teach the manner to compose inscriptions: but several amongst them have suffered themselves to be led away by a desire of displaying wit, and the sentences which they propose as models offend, consequently, from want of simplicity.

A knowledge of ancient characters is exceedingly useful both to the student and amateur, as it enables them to decipher the words found on monuments of remote times, and to fix with some precision their respective dates. The celebrated Heyne has extracted from the epigrams of the poets of the Anthology much curious information respecting the ancient monuments of art. It is necessary to be very cautious as to the introduction of written characters into a picture, and when done, it should be in the place and manner least likely to injure the general effect. Instances abound of very bad taste in this particular: as, for example, in Paul Veronese's painting of the Repast with the Pharisee, wherein is represented Mary Magdalen at the foot of Christ, and two angels holding in the air a scroll with these words: *Gaudium in cœlo super uno peccatore pœnitentiam agente* ("There is joy in heaven over one sinner that repenteth"). From this censure we must however except Poussin, who has afforded us the happiest specimen of an inscription placed in the most prominent part of the picture. The scene is in Arcadia: a young man and a young girl arrive in a country glowing with beauty and inviting to enjoyment; on their way they encounter a rural tomb, beside which is a shepherd, who points out on the sepulchral stone these words: ET IN ARCADIA EGO, "I also was an Arcadian."

Inscriptions or mottoes are also common to coats of arms, shields, warlike-weapons, rings, &c.

The following works have treated at large on the utility of the art of writing inscriptions.—Franc. Oudendorpii, *Orat. de veteribus Inscriptionibus et Monumentorum Usu*, Lugduni Batavorum, 1745, 4to.; J. F. Eisenharti, *Comment. de Auctorit. et Usu Inscriptionum in Jure*, Helmst. 1750, 4to. *Essais sur l'Histoire des Belles Lettres, des Sciences, et des Arts*, par Jouvenel de Carlencas, chap. x. vol. II. Jo. Aug. Ernesti, *Archæologia Literaria*, 36th and following pages, Lipsiæ, 1790, 8vo. Christ. Abhandlungen, *Uber Die Litteraturund Kunst-Werke, Vornemlich des Alterthums*, Leipzig, 1776, 8vo. Martini, *Litterair Archæologie*, Altenburg, 1796, 8vo. Sainte-Croix, *Essai sur les Inscriptions antiques, dans le Magasin Encyclop. Nouveau Traité de Diplomatique*, par Deux Bénédictins, 6 vols, 4to.

The first persons who occupied themselves in making collections of antique inscriptions were, Cyriacus of Ancona, Giovanni Marcanova of Padua, and Felice Feliciano of Verona, who all flourished in the fifteenth century. Since their time, various collections have appeared in different works, professedly published for the purpose; besides which, specimens of these inscriptions are to be met with in almost all the great works on antiquity:—such, for instance, as the *Antiquité expliquée de* Montfaucon; the *Antiquitas Urbæ Romanæ* of Boissard; the *Miscellanea eruditæ antiquitatis* of Spon; the *Recueil d'Antiquités* de Caylus; *Mémoires de L'Académie des Inscriptions*, in the *Monumenti Inediti* di Guattini; *Monumens antiques inédits* de Millin; *Marmora Arundelliana, sive Saxa Græce incisa, publicavit*

Joan. Seldenus; *Archæologia Britannica*, &c. &c.

Other authors have devoted their attention more particularly to Christian inscriptions. Among these books are:—*La Roma sotteranea* di Antonio Bosio, Roma, 1632, fol.; *La Roma sotteranea* d'Aringhi, Roma, 1651, 2 vols. fol.; *Osservazioni sopra i Cimiteri de' Santi Martiri*, da Boldetti, Rom. 1720, 2 vols. fol.; Anton. Mar. Lupi, *Dissertatio et Animadversiones ad nuper inventum severæ Martyris Epitaphium*, Panormi, 1754, fol. (a work of great interest and value from its perfect knowledge of the subject); *Illustrazione di un Antico piombo del Museo Borgiano di Velletri, appartenente alla Memoria ed al Culto di* San Genesio, *Vescovo di Brescello, opusculo del P. Ireneo Affo*, Parma. 1790, 4to.

For modern inscriptions the reader is referred to the following works:—Joannis Christoph. Bœhmeri, *Inscriptiones Sepulcrales Helmstadienses*, Helmst. 1710, 8vo.; Johann. Gottfr. Michaelis, *Inscriptions et Epit. de Dresde*, Dresden, 1714, 4to.; Joan. August. Guidarelli, *Inscriptiones nonnullæ*, Perus, 1721, 8vo.; Joan. Phil. Slevogtii, *Inscriptiones varii generis*, Jena, 1724, 4to.; J. C. Nemeiz, *Inscriptionum singularium fasciculus*, Lipsiæ, 1726, 8vo.; Totdervy's *Epitaphs*, London, 1754, 2 vols. 12mo.; *Recueil d'Epitaphes sérieuses, badines, satyriques, et burlesques*, par De Laplace, Brussels, 1782, 3 vols. 12mo. See ARMS, DEVICE, EPIGRAPH.

INSTITUTE, NATIONAL, *of France*, or, as it is now called, the INSTITUTE OF FRANCE, was established on the suggestion of Condorcet, in the year 1795, and was opened on the 7th of December, of that year, by Benezech, the minister for the Home Department. It was formed out of the Royal Academy of Sciences, the French Academy, the Academy of Inscriptions and Belles Lettres, and the Academy of Painting and Sculpture, &c. It was reorganized in 1806, during the consulship of Bonaparte, and it again experienced considerable changes in the year 1816, after the second return of the Bourbons.

In order to understand the changes which this distinguished body has recently undergone, we shall first lay before our readers an account of the National Institute, as it existed in the early time of Bonaparte.

1. The National Institute consists of four classes, viz.:—1. Class of Physical and Mathematical Sciences. 2. Class of French Language and Literature. 3. Class of History and Foreign Literature. 4. Class of Fine Arts.

2. The first class shall be formed of the ten sections which at present compose the first class of the Institute, with a new section of geography and navigation, and eight foreign associates.

The sections shall be composed and named as follows:

MATHEMATICAL SCIENCES.

	Members.	Corresponding Members.
Geometry	6	6
Mechanics	6	6
Astronomy	6	16
Geography and Navigation	3	8
General Physics	6	6

PHYSICAL SCIENCES.

Chemistry	6	12
Mineralogy	6	8
Botany	6	10
Rural Economy and the Veterinary Art	6	10
Anatomy and Zoology	6	10
Medicine and Surgery	6	8

The first class shall appoint, with the approbation of the first consul, two perpetual secretaries, one for the mathematical sciences, and the other for the physical sciences. The perpetual secretaries shall be members of the class, but shall not form a part of any section.

The first class may elect six of its members from the other classes of the Institute.

It may name a hundred correspondents, selected from the learned men of France and foreign countries.

3. The second class shall be composed of forty members.

It is particularly charged with the composition of the dictionary of the French language. It shall examine, with respect to language, the important works of literature, history, and the sciences. The collection of its critical observations shall be published, at least, four times a year.

It shall name, from its own body, and with the approbation of the first consul, a perpetual secretary, who shall continue to be of the number of the forty members which compose it.

It may elect twelve of its members from the other classes of the Institute.

4. The third class shall be composed of forty members, and eight foreign associates.

The object of its researches and labours shall be learned languages; antiquities and monuments, history, and all the moral and political sciences connected with history. It shall particularly apply itself to the enriching of French literature with

the works of Greek, Latin, and oriental authors, which have not yet been translated.

It shall employ itself in the continuation of diplomatic collections.

It shall name from its own body, under the approbation of the first consul, a perpetual secretary, who shall be of the number of the forty members which compose the class.

It may elect nine of its members from the other classes of the Institute.

It may name sixty correspondents, natives and foreigners.

5. The fourth class shall be composed of twenty-eight members, and eight foreign associates.

They shall be divided into sections as follows:

Painting	10	members.
Sculpture	6	do.
Architecture	6	do.
Engraving	3	do.
Musical Composition	3	do.

It shall appoint, with the approbation of the first consul, a perpetual secretary, who shall be a member of the class, but shall not be a part of a section.

It may elect six of its members from the other classes of the Institute.

It may name thirty-six correspondents national or foreign.

6. The foreign associated members shall have a deliberative voice only on subjects of science, literature, and the arts; they shall not form part of any section, nor interfere in any usage.

7. The present actual national associates of the Institute shall form part of the one hundred and ninety-six correspondents attached to the classes of the sciences, belles lettres, and the fine arts.—Correspondents may not assume the title of members of the Institute.

They shall lose that of correspondent when they shall be domiciliated at Paris.

8. Nominations to vacant places shall be made by each class in which the vacancy happens; the persons elected shall be confirmed by the first consul.

9. The members of the four classes shall enjoy a reciprocal right to assist at the particular sittings of each class, and may deliver lectures when they are requested.

They shall reunite four times in a year into one body, to communicate their proceedings.

They shall elect in common the librarian and under librarian of the Institute, as well as all those agents who belong to the Institute in common.

Each class shall present, for the approbation of the government, the particular statutes and regulations of its internal police.

10. Each class shall hold one public sitting every year, at which the other three shall assist.

11. The Institute shall receive annually from the public treasury 1500 francs for each of its nonassociated members, 6000 francs for each of its perpetual secretaries; and for its expenses, a sum which shall be fixed every year, upon the demand of the Institute, and comprised in the estimates of the minister of the interior.

12. There shall be an administrative committee of the Institute, composed of five members, two from the first class, and one from each of the others, named in their respective classes.

This committee shall regulate in the general sittings, prescribed by article 9, all that relates to the administration, to general expenses of the Institute, and to the division of its funds between the four classes.

Each class shall afterwards regulate the application of the funds assigned to it for its expenses, as well as all that concerns the printing and publishing its memoirs.

13. The classes shall annually distribute prizes, thus regulated:

The first class a prize of 3000 francs.

The second and third class each a prize of 1500 francs.

The fourth class, grand prizes of painting, sculpture, architecture, and musical composition; those who gain one of the grand prizes shall be sent to Rome, and maintained at the expense of government.

On 21st March, 1816, an order was issued by Louis XVIII. for new modeling the Institute, of which the following is an abstract:

1. The INSTITUTE shall be composed of four *academies*, viz.

The French Academy.

The Royal Academy of Inscriptions and Belles Lettres.

The Royal Academy of Sciences.

The Royal Academy of the Fine Arts.

2. The academies are under the direct and special protection of the king.

3. Every academy shall have an independent regime and free disposal of the funds which belong to it.

4. The agency, the secretariat, the library, and the other collections of the Institute shall remain common to the four academies.

5. The property common to the four academies, and the common funds which belong to them, shall be managed under

the authority of the secretary of state for the interior, by a commission of eight members, of which two shall be taken from each academy; these commissioners shall be elected annually, and shall be always reeligible.

6. The property or funds of each academy shall be managed in its name by the boards or commissions instituted for this purpose.

7. The academies shall hold a common public sitting on the 24th April, the day on which the Bourbons returned to France.

8. The members of each academy may be elected to the three other academies.

9. The French academy shall reserve its ancient statutes, with such modifications as may be thought necessary.

10. It shall be composed of *thirty-eight* members.

11. The Academy of Inscriptions and Belles Lettres shall preserve the organization and the distributions into sections of the first class of the Institute.

14. The Royal Academy of the Fine Arts shall preserve the organization and the distributions into sections of the fourth class of the Institute.

It shall be composed as follows:

Painting	14	members.
Sculpture	8	do.
Architecture	8	do.
Engraving	4	do.
Musical Composition	6	do.

16. There shall be added to the Royal Academy of Inscriptions and Belles Lettres, and to the Royal Academy of Sciences, a class of free academicians, to the number of ten to each of these academies.

17. The free academicians shall have no other privilege than that of the right of attendance, they shall enjoy the same rights as the other academicians, and shall be elected according to the usual forms.

18. The ancient honorary members and academicians, both of the Royal Academy of Sciences, and of the Royal Academy of Inscriptions and Belles Lettres, shall be free academicians of the academy to which they belong.

These academicians shall make the necessary elections for completing the number of ten free academicians in each.

19. The Royal Academy of Fine Arts shall likewise have a class of free academicians, of which the number shall be determined by a particular regulation upon the proposition of the academy itself.

20. The minister of the interior shall submit to the king, for his approbation, the modifications which may be thought necessary in the regulations of the first, third, and fourth classes of the Institute, for adapting the said regulations to the Royal Academy of Sciences, to the Royal Academy of Inscriptions and Belles Lettres, and to the Royal Academy of the Fine Arts.

21. All the decrees and regulations which contain nothing contrary to the regulations of the present ordonnance shall be maintained.—The following is a correct statement of the volumes of memoirs published by the Institute of France:

Number of volumes published from the foundation of the Institute till 1806 by the three classes	16	in 4to.
Number of volumes published from 1806 to 1812: viz;		
Volumes published by the Academy of Sciences	7	
Academy of Inscriptions	4	
Mémoires de Savans étrangers	2	
Système Métrique	3	
Etat du Science et des Lettres	2	
Prix Décennaux	1	
Total	35	vols.

The volumes of memoirs for 1813, 1814, 1815, and 1816, have not yet appeared.

Instruments, *Mathematical.* A common case of these contains:—1. A pair of plain compasses. 2. A pair of drawing compasses. 3. A drawing pen. 4. A protractor. 5. A parallel ruler. 6. A plain scale. 7. A sector, besides black lead pencils. *Drawing* instruments are much the same, with the addition of hair pencils, a drawing board to fix the paper upon, and a T square or ruler, made in the form of the letter T.

Intaglio. [Ital.] *In sculpture and engraving.* Any thing that has figures engraved on it so as to rise above the ground thereof. More particularly, precious stones, on which are engraved the heads of great men, inscriptions, and the like; such as we frequently see set in rings, seals, &c.

Interest. [*inter*, between, and *esse*, to be, Lat.] *In all the arts.* That emotion of which the mind is sensible from the view or contemplation of any given object which excites it. The painter and sculptor should both study not only to make choice of subjects in themselves interesting, but to seize on the very point of time connected

with that subject which is likely to create the most powerful effect. Those grand compositions which represent an assembled people, a battle, or ceremony, are not susceptible, by any means, of so high a degree of interest as is raised by many a meritorious work depicting only one figure, or a very small number of figures, and where, consequently, the interest is more condensed, and therefore likely to be more powerful. At the same time, the artist should be careful not to select too painful a subject, lest a feeling of disgust and horror should supersede that admiration to which the delineation of the truly pathetic naturally gives birth.

INTERCOLUMNIATION. [*inter* and *columna*, Lat.] *In architecture.* One of the great divisions of the elements of Grecian architecture, and on which the elegance and magnificence of a structure greatly depends, is the various modes of distributing the columns, which are all settled more or less according to laws founded on good taste, reason, beauty, and strength. Columns are placed at various distances from each other, not by chance or caprice, but according to rule; and the vacuity, or interval between one column and another is called the intercolumniation. These intervals, or intercolumniations, differ in the different orders; and the style of porticoes or colonnades is named from them as follows:

The first style or manner of intercolumniation is called *Pycnostyle*, or columns thick set. The space between each column in this mode is one diameter and a half. Of this style are the Parthenon and the temple of Theseus.

The second is called *Systyle*, and has two diameters between the columns.

The third mode of intercolumniating a building is called *Diastyle;* and its width is three diameters.

The fourth style is called *Aræostyle*, or columns thinly set, and its width is four diameters.

The fifth and last style or mode is called *Eustyle*, and is, according to Vitruvius, the most pleasing and eligible for general use. It is formed by allowing to the distance of the intercolumniations two diameters and a quarter, and to the middle one, only, both before and behind, three diameters. The author of this work here takes leave to observe, that (as it strikes him), the most eligible mode of intercolumniating, or distributing the distances of columns in a design, is according to the specific dimensions of the building, and the number of columns to be used.

Besides these orders or styles of intercolumniation, porticoes are also named from the number of columns of which they are composed, and are called tetrastyle, hexastyle, octastyle, and decastyle, according as they consist of four, six, eight, or ten columns in front.

INTERMODILLION. [*inter*, Lat. *modillon*, Fr.] *In architecture.* The space between two modillions, which ought always to be equal.

INTERPILASTER. [*inter*, Lat. and *pilastre*, Fr.] *In architecture.* The interval between two pilasters, which should invariably be regulated by the rules and principles followed in intercolumniation, more particularly when both pilasters and columns are used in the decoration of a building.

INVENTION. [Fr.] *In all the arts.* That property by virtue of which any thing is *originated.* Judging by this strict standard, the claims of many an artist and poet to the merit of invention would be set aside. Solomon, indeed, said in his day that there was nothing new under the sun: too much therefore must not be expected from generations so remote from him as the present.

In fact, novel arrangement and combination may fairly aspire to the distinction of this title (see COMPOSITION): but, to that end, it is necessary that the artist should feel himself inspired with a high *gusto* for the subject he has made choice of; that he should take care to inform himself of all the peculiar circumstances connected therewith; and that he should fit his mind, by patient and persevering thought, for the exercise of its greatest faculty.

Sometimes, however, a fortunate accident becomes the leading cause of invention. It is said, for instance, that the consummate beauty of the Corinthian capital owes its origin to the affection of a Grecian nurse, who placed a basket of flowers on the tomb of her deceased charge. See ARCHITECTURE.

The artist who is desirous of acquiring for himself the superlative praise of invention must be content to devote his mind and attention altogether to his art. Like the true poet, he should refer every thing he sees, every thing he hears, to the chance of its becoming useful to his professional purposes. Leonardo da Vinci hesitated not to avow that even from the stains wrought by time on old walls he obtained many excellent hints, and to this apparently unfruitful subject did he dedicate an entire chapter of his work.

With regard to invention in the arts of design, the reader is referred to the fol-

lowing works:—*Dialogo della Pittura*, by Louis Dolce, p. 150 of the edit. of 1735; the ninth chapter of the first book of *Veri Precetti della Pittura*, by Giov. Batt. Armenini; Franc. Lana, in the first chapter of his *Prodromo*, Bresc. 1670, fol.; *La Nuova Raccolta d'Opuscuoli scientif. e filol.* by the Abbé Giovandr. Lazzarini, vol. i. p. 97, Pez. 1763, 4to.; Algarotti, in his *Essai sur la Peinture*; Richardson, in his *Treatise on Painting*; Hagedorn, in the eleventh *Considération sur la Peinture*, &c. &c. See DRAWING.

IONIAN. [from *Ionia.*] *In sculpture and architecture.* After the manner and style of the people of Ionia.

IONIC. [from *Ionia.*] *In architecture.* The second of the Grecian orders of architecture, and the third according to the Roman system. See ORDERS, ARCHITECTURE, CAPITALS, COLUMNS.

IRON, [ɪɲɛn, Sax.] *In mineralogy and the archaiology of sculpture.* One of the imperfect metals, but the hardest and most generally useful, as well as the most abundant. Iron is attracted by the magnet, and is capable of becoming magnetic; but it retains this quality only a short time. Iron unites with carbon, and, according to the proportions, the compound is either black lead or steel.

Goguet is of opinion that at the epoch of the siege of Troy, iron was extremely rare among the Greeks. Achilles, says he, in the funeral games celebrated by him in honour of Patroclus, proposed a ball of iron as the prize of one of the combats. He made it, at the same time, the meed of the conqueror and the subject of the contest, it being necessary, in order to obtain this prize, to hurl it to a greater distance than either of the other combatants. It must be remarked, however, thoroughly to understand this circumstance, that the said ball of iron was proposed by Achilles, not as a thing precious in its nature, but as having been the weapon of a celebrated champion, which it was therefore glorious to possess.

This metal is not sufficiently fusible, neither does it take the impression of the mould with facility enough, to render it useful in casting statues. It is recorded, however, that instances of this kind have existed. Pliny makes mention of a statue of Hercules in iron, and adds, that the artist was determined in his choice of the material by the idea of implying thereby the unexampled endurance with which the hero achieved his gigantic labours.

ISIAC TABLE is a name given by antiquarians to an Egyptian monument, in the form of a plate of copper or brass, containing various figures in basso rilievo.

This piece of antiquity was discovered at Rome in the year 1525, when Constable Bourbon took that city. It was purchased from a soldier by a locksmith, who sold it to Cardinal Bembo, after whose death it came into the possession of the Duke of Mantua. When Mantua was taken by the Imperialists in 1630, it appears to have been lost, as it has never since been heard of. It was, however, engraved in its full size by Æneas Vico, of Parma. This plate was divided into three horizontal compartments, containing hieroglyphics and figures of gods. Antiquarians are not agreed respecting the object of this piece of antiquity, and there is some reason to believe that it was fabricated at Rome. See *Banier's Mythology*, vol. i. p. 567; Jablonski, *Pantheon Egyptiacum*; Pignorius, *Characteres Egyptii;* and Jablonski, *Miscellanea Berolinensia.*

ISODOMON. [Gr.] *In architecture.* One of the Greek methods of construction, and was of courses of equal thicknesses and equal lengths. This manner, as being the most beautiful, was used by them in their grandest buildings. See ARCHITECTURE.

ISPAHAN, ISFAHAN or SFAHAN. *In the history of art.* A city of Persia in the province of Irak, situated towards the south part of a very extensive plain, on the north bank of the river Zainderond, which is not fordable in spring, and is crossed by several fine bridges.

Ispahan, in its most prosperous days, was surrounded by a wall twenty miles in circuit; but the inhabited part of the city is now restricted to a space of between two or three miles diameter. Every where it is surrounded by ruins, extending to a great distance. Some of its most extensive suburbs have entirely disappeared, and the most populous quarters are deserted. Beheld from the top of the highest edifices, all the buildings exhibit a light yellow colour; and were it not for the intermixture of trees, the view would be monotonous. The domes of the numerous mosques are a field of green, or sometimes blue lacquered tiles, with ornaments in blue, yellow, or red, and they are crowned by golden balls and a crescent. When visited by Chardin, the walls were so completely covered by houses, as scarcely to be discernible. He observes, that he did not take a plan of the city; neither did he give any view of it except in a vignette, "because, from whatever side the city is beheld it resembles a wood, where only domes are to be seen, with lofty slender

towers attached to them, serving the Mahometans for belfries. Chardin relates, that in his time, namely, between the years 1666 and 1676, there were within the walls one hundred and sixty-two mosques, forty-eight colleges, one thousand eight hundred and two caravanseras, two hundred and seventy-three baths, twelve cemeteries, and the number of houses was computed at thirty-eight thousand. But the city has since undergone so many dilapidations, that, in addition to the total destruction of the walls, many of the most celebrated edifices have perished. But the Shah Maidan, or Royal Square, is still the finest and the largest in the universe, and its bazars and religious edifices rival any to be seen in eastern kingdoms. It is four hundred and forty paces in length by one hundred and sixty in breadth. At the distance of twenty-five feet from the houses it was surrounded by a canal, bordered by lofty trees, both of which are now destroyed. On the south side stands the royal mosque, a magnificent building, which was constructed by Shah Abbas in the sixteenth century. Every part of it exhibits a style of architectural ornament quite unknown in Europe. It is entered by a gate twelve feet wide, closed by two leaves, covered with plates of solid silver, partly gilt and sculptured, which were added by Shah Sefi the First. An iron chain hangs across the outside towards the square. Within these are fountains flowing into jasper basons, spacious courts, and extensive porticos, of which that in the centre is surmounted by a vast dome and gilt crescent, visible at the distance of four leagues on the road from Casan. All this edifice is constructed of massy stone, covered with highly varnished bricks and tiles, upon which are inscribed sentences of the Koran. Though the royal mosque has lofty minarets, they are not used for calling the people to prayers, from their overlooking the neighbouring houses, which excites the jealousy of the inhabitants. On the other side of the Maidan there is a Mahometan college, called the *Medresse Shah Sullan Hassein.* Its entrance is gained by a lofty portico, enriched with twisted pillars of beautiful Tabriz marble which leads through two brazen gates, the extremities of which are of silver, and their whole surface highly sculptured and embossed with flowers, and verses from the Koran. They open into a court on the right side of which is a mosque, with a great cupola covered with lacquered tiles, and adorned externally with ornaments of pure gold. It is faced by two minarets; but they can no longer be ascended, as the stairs are destroyed, and the dome itself is falling to decay, but its interior is richly spread with variegated tiles, bearing a profusion of inscriptions. The other sides of the square are occupied, one by a high and beautiful portico, and the remaining two by small square cells with carpets, as rooms for the students; twelve in each front disposed in two stories. Here there are thirty professors, who not only instruct the youth in reading and writing, but in the languages, belles lettres, geometry, astronomy, and astrology. M. Oliver was informed, that in 1796 there were three hundred or four hundred pupils; but formerly, as many thousands had attended it.

The palaces of the king are enclosed in a fort of lofty walls, which are about three miles in circuit, and to which there is nothing at all comparable in Europe, whether in appearance or extent, or in the number and beauty of the edifices, dispersed over spacious gardens. In general, the front room or hall is very open, and supported by pillars exquisitely carved and gilded; while the large glass windows, through which it receives a mellow light, are curiously stained with a variety of colours. Each has a fountain in front. The palace *Chehel Sitoon*, or *forty pillars*, stands in the middle of an immense square, intersected by various canals, and planted with trees. Towards the garden there is an open saloon, supported by eighteen pillars, each inlaid with mirrors, and appearing from a distance to consist entirely of glass. The base of each pillar is marble, sculptured into the figures of four lions, so disposed that the shaft rests on the whole. Mirrors are likewise profusely arranged over the walls; and the cieling is decorated with flowers in gilding. An arched recess, embellished in the same manner with glass and portraits, leads into a spacious and splendid hall. The roof is formed into a variety of domes and figures, and is tastefully painted and gilded. Part of the walls consists of white marble, and part is covered with mirrors; they are besides ornamented with six large paintings, chiefly of Shah Ismael, and Shah Abbas the Great, in battles and in royal fêtes, which are all of considerable age, yet the colours are perfectly fresh, and the gilding surprisingly brilliant. No furniture remains here except carpets. Those of the time of Abbas, centuries old, are superior to the fabric of the present day. Adjoining to this palace is the harem, which was erected by the second minister a few years ago, and presented to the king. The apartments are

alike elegant as those of the other: the walls painted with birds, ravenous animals, and bouquets of flowers: besides which, they are resplendent with mirrors and gildings. Here are seen the portraits of several sovereigns, particularly of the present king, for whom an establishment, complete in all its parts, is always kept in readiness, though he resides at Teheran, many miles distant. The windows of this palace display some beautiful specimens of stained glass and enamelling, disposed in couplets, in honour of the monarch, together with quotations from the Koran. It appears from Chardin, that the kings of Persia have always had a number of palaces, arising from confiscations. But he observes, that of one hundred and thirty-seven which belonged to him, the greater part were uninhabited, and many falling to ruin. Most of the caravanseras and bazars are very fine. Some of the former are large, and appropriated for travellers from their respective provinces; so that no difficulty occurs in finding a stranger. Short and expressive sentences are frequently inscribed on the outside, such as, "Two companions are indispensable for a traveller, a long purse and a good sword;" or, "Ask for nothing more than others have previously had," and the like.

The bazars are highly celebrated, consisting of large wide streets, arched, and lighted from above. Several are covered with domes, and painted, especially in the interior, with portraits of the heroes of the country, with combats, the figures of beasts, and similar subjects. The most extensive bazar was formerly six hundred geometrical paces in length, very broad and lofty, but we do not know that any are now so large. By means of successive communications, a passenger could traverse the whole city sheltered from the elements. A new one has been built, and those of older date repaired by the patriotic minister Hajee Mahomet Hussein Khan.

Ivory. [*ivoire*, Fr.] *In all the arts.* The substance of the tusk of the elephant. Ivory is esteemed for its beautiful cream colour, the fineness of its grain, and the high polish it is capable of receiving. That of India is apt to lose its colour, and turn yellow; but the ivory of Achem and Ceylon is not chargeable with this defect. Ivory is used as a material for toys, and as panels for miniature-paintings; to prepare it for which latter purpose, it is to be washed with the juice of garlic, or some other absorbent composition to remove its oily particles. The shavings of ivory may be reduced into a jelly, of a nature similar to that of hartshorn; or, by burning in a crucible, they may be converted into a black powder, which is used in painting under the name of ivory-black.

Ivory may be stained or dyed:—a black colour is given it by a solution of brass and a decoction of logwood; a green one, by a solution of verdegris; and a red, by being boiled with brazil-wood in lime water.

The use of ivory was well known in very early ages. We find it employed for arms, girdles, sceptres, harnesses of horses, sword-hilts, &c. The ancients were also acquainted with the art of sculpturing in ivory, of dying and encrusting it. Homer refers to the extreme whiteness of ivory. The coffer of Cypselus was doubtless the most ancient monument of this kind in basso-rilievo, and we meet with similar instances in the temple of Juno, at Olympius, in the time of Pausanias—that is to say, seven hundred years after it had been built.

Antiquity possessed numerous statues of ivory, particularly in the temples of Jupiter and of Juno at Olympius. In these statues there was very frequently a mixture of gold. The most celebrated are stated to have been the Olympian Jupiter and the Minerva of Phidias: the former was covered with a golden drapery, and seated on a throne formed of gold, of ivory and cedar-wood, and enriched with precious stones. In his hand the god held a figure of Victory, alike of ivory and gold. The Minerva was erected in the Parthenon at Athens during the first year of the eighty-seventh Olympiad, the year which commenced the Peloponnesan war. Pausanias, likewise, makes mention of an ivory statue of Juno, on her throne, of remarkable magnificence, by Polycletes, together with an infinity of others. See Eborarius.

For more detailed particulars respecting the qualities of ivory, consult:—*La Dissertation sur l'Ivoire*, par M. Heyne, or a treatise, under the same title, by Daubenton, in the *Mémoires de l'Académie des Sciences.*

Ivy. [ифиг, Sax.] *In mythological painting and sculpture.* A plant, the leaves of which were made very plentiful use of by ancient artists on vases, pedestals, altars, &c. It was also, in the shape of a crown, the constant attribute of Bacchus, probably because, being evergreen, it implied, in an allegorical and at the same time elegant manner, the eternal youth of that deity.

J

Jamb. [*jambe*, leg, Fr.] *In architecture.* This name is applied to a pillar raised perpendicularly to support the superior parts of a building. They are of various kinds according to their situation.

Jasper. [*jaspe*, Fr.] *In gem sculpture.* A genus of stones of the siliceous class. It includes the blood-stone, so called from its being supposed efficacious in stopping blood; a quality probably imputed on account of the crimson spots which diversify its green-coloured substance. Daubenton enumerates fourteen other varieties. Theophrastus and Pliny have treated of this stone, and many artists have employed it. Modern artists, however, have not made great use of the jasper because it does not yield well to the graver, neither is it susceptible of a fine polish. Natter writes of an engraving upon a red jasper, the ground of which is of a transparent chalcedony. This fine gem is the only one of the kind which has been discovered either ancient or modern. It was chiefly the Greek engravers of the Lower Empire who, since the establishment of Christianity, have employed this stone. The Italian engravers have followed their example. It has been especially used for representations of the bust of Christ after the crowning with thorns or after the flagellation. The principal reason for this appears to be, that the sanguine spots peculiar to the jasper harmonise with the expression of torment, sought to be given. This reason, however, is not a very good one, as these same spots, on the other hand, often interfere with, instead of heightening, the expression of the engraving. The jasper is of various colours. The Italians call one particular species *diaspro*, which is green with transparent spots. Pliny mentions this sort: there is a variety of it, of which however many specimens have not appeared, interspersed with white streaks.

Jealousy. [*jalousie*, Fr.] *In the history of the arts.* This passion produces effects mournful and terrific, while that of emulation inspires one with fair and honourable rivalry. We know to what excess it drove Andrea Castagna. Dominico, a Venetian, having gone to establish himself at Florence, Andrea, by dint of assiduity and caresses, gained his confidence, and induced Dominico to instruct him in the important art which he possessed of painting in oil. From the time that he had acquired this, no longer regarding his friend but as a rival of whom it was desirable to get rid, he resolved to disengage himself from the unwary and unfortunate Venetian, whom he finally poniarded. Michel Angiolo, jealous of the reputation of Leonardo da Vinci, drew upon him so much odium, and rendered his life so disagreeable, that he was necessitated to expatriate himself. He also applied himself to get the still more illustrious Raffaelle regarded merely as a plagiarist from him, and attempted to set up as that great man's rival Fra Bastian del Piombo. The talent of Zampieri was strenuously denied, and himself as strenuously persecuted, by several contemporaries, and above all by Lanfranc. Having quitted Rome he sought refuge in Naples, where he found in L'Espagnolet a mortal enemy. Overcome by distress of mind, and in constant dread of being poisoned, this ill-fated artist met death in a shape under which he has presented himself, we lament to add, to many other of the sons of genius—disappointment and hunger. The violent and premature death of Chenda is also attributable to jealousy. The distaste which Poussin and Lesueur excited in the breast of Lebrun obliged the former to quit France, and embittered the days of the latter. Poor Lesueur! even his works, as well as their author, were subjected to the withering touch of jealousy. The finest heads—the most artistical effects about his pictures for the cloister of the Chartreux were defaced with a knife, and their expression rendered absolutely ridiculous, while, from the manner in which the instrument had been used, it is obvious that the hands of an artist were employed for the unworthy purpose. This passion indeed, although often shown in acts of dark atrocity, is still more frequently productive of low manœuvres, dirty intrigues, and humiliating contrivances.

Jesus. [יהשוע, a Saviour, Heb.] *In painting and sculpture.* The divine founder of the Christian religion is often found represented on monuments offered by the piety of the faithful, and principally upon those of the time of the primitive church, as appears by the collections of Aringhius, Bosius, Buonarrotti, Alegranza, Bottari, &c. whom we have already repeatedly cited. Unfortunately, the primitive Chris-

tians were chiefly poor, and consequently were not able to afford to have these figures executed so well as they might have been: and by the time the religion had made progress, and enlisted amongst its followers the rich and powerful, the decline of art was apparent and rapid. Hence the *ideal* of Christ, of the Virgin, the Saints, and other personages celebrated in the New Testament was scarcely formed until after the revival of the arts, and under the guidance of the great modern artists, who, however, do not seem to have used much exertion to bestow on the representation of the Divine Being that characteristic expression which belongs to the Saviour of the human race. In the greater number, indeed, of those works in which He is introduced, the head has something in it of ignoble rather than illustrious, and often sinks in character below that of every other person introduced into the picture. The Greeks took care to give a divine beauty to all the objects of their worship, and we are tempted to say, with Winckelmann, that the true spirit of ancient art should inspire the modern painter or sculptor before he will be able to treat with becoming dignity the figure of Christ.

Raffaelle, it is true, has done something towards removing this reproach from the great names of modern art, as appears conspicuously in a little design found in the Farnese cabinet at Naples, the head of which is that of a beautiful youth, without beard. Annibale Caracci, and perhaps he alone, has followed Raffaelle in this respect, as we may judge by three pictures of his on the same subject:—the first in the Farnese cabinet; the second and third at Rome. Some, however, would consider it an unpardonable innovation to represent Christ beardless, and amongst those heads which are painted after the more received manner, we should be inclined to refer the student, for a model, to Leonardo da Vinci. Winckelmann bestows the most rapturous commendation upon one particular head of Christ by this master, in the cabinet of the Prince de Lichtenstein, at Vienna. It is bearded, expresses the greatest possible degree of manly beauty, and is perhaps the most perfect thing in existence of its kind. Artists appear, generally speaking, to have preferred painting figures of the infant Jesus, because in infancy the features are less marked, and consequently little or no demand made on the imagination. The exquisite pictures of Raffaelle representing the Holy Family, the sleeping Jesus, and the Virgin and Charity, are all models of this species of composition. The early artists gave Christ a tunic, with a border of purple, and sometimes of gold, but in the latter case they seem to have gone out of the ordinary way for the purpose of doing honour to the image of the Saviour, and not in consequence of any kind of authority. They also give him an ample white cloak as symbolical of his purity. He is made to wear sandals, and not covered shoes, the use of which he forbade to his disciples: the head is often surrounded by a glory. Besides the direct representations of Jesus, he is sometimes also allegorically painted under the figure of a lamb, or flower, or by his monogram; either placed alone or in the midst of angels and cherubim. When not forming part of any composition, his figure is often represented in a medallion, as is sometimes seen upon sarcophagi.

Jet. [*jeter*, to throw, Fr.] *In sculpture.* In the casting of statues this word is used to denominate the channels by which the metal, in a state of fusion, is introduced into the mould.

Jet d'eau. [Fr.] *In hydraulics.* A movement of water, elevated into the air, by means of a pipe or tube placed in the middle of a basin, from the upper extremity of which pipe the water issues, and falls again into the basin below.

Joinery. [from *joindre*, Fr.] Joinery is that branch of civil architecture which treats of the art of framing and joining wood together, for the internal and external finishing of houses.

The smoothing of wood by cutting the superfluous parts away in thin equal slices is called *planing*, and the tools used for this purpose are called *planes*, whether they are employed in reducing the surface to a plane, or to a convex, a concave, or an undulated form.

The wood is called *stuff*, and is previously formed into rectangular prisms by the saw. These prisms are denominated deals, boards, battens, planks, &c. according to their dimensions in breadth and thickness. So that in this article, whenever a piece of wood is spoken of, it is understood to be bounded by six planes, and to have all its angles right angles.

The *arrises* are the lines of concourse formed by every two planes, and are therefore eight in number.

Deals are of two kinds, white and yellow; the white is employed for panelling, and the yellow for the framing. But of late, instead of white deal, American wood has been brought into use, and employed both in framing and panelling. It is soft,

very free from knots, and easily wrought, but is more liable to warp than white deal.

Of Mouldings.

As mouldings have already been defined under CIVIL ARCHITECTURE, we shall here only point out those which are commonly used in joinery.

Wood is generally much thinner than the dimension of its breadth and thickness on the sides of the rectangular section made by cutting it perpendicular to the fibres, the length being understood to be parallel to the fibres. The faces are the two broad planes that run in the direction of the fibres, and the edges are the two narrow planes, which also run in the direction of the fibres; the ends are the two planes perpendicular to the fibres.

When the wood has been reduced to the rectangular shape by the square and plane, so that the sides may be planes, and the angles right angles, the next operation is to take away the right angles, and reduce the wood to mouldings, which is called *sticking*, and the moulding is said to be *stuck*.

When the edge of a piece of wood is reduced to a cylindrical form, it is said to be *rounded*, which is the simplest species of moulded work.

When a part of the arris is reduced to a semicylinder, so that the surface of the cylindrical part may be flush, both with the face and edge of the wood, and that a groove or sinking may be made in the face, only the cylindrical part is called a bead, and the sinking a *quirk*, so that the moulding is called a *quirked bead*.

When a quirk is also formed in the narrow plane, or edge, so as to make the rounded part at the angle three fourths of a cylinder, the moulding obtains the name of *bead and double quirk*.

When they are two semicylindrical mouldings, rising both from a plane parallel to the face; and when one comes close to the edge of the piece, and the other has a quirk on the farther side, and its surface flush with the face of the wood, the combinations of these mouldings are termed a *double bead*, or double bead and quirk. In this combination, the bead which is next to the edge of the stuff is much less than the other.

Mouldings are generally separated from one another, and frequently terminated by two narrow planes, at right angles to each other, called *fillets*, which show two sides of a rectangle prism.

Mouldings, as well as fillets, are called members.

When a semicylindrical moulding which rises from a plane parallel to the face, is terminated on the edge by a fillet, the two members thus combined are called a torus.

If there be two semicylindrical mouldings springing from a plane parallel to the face, terminated on the edge by a fillet, this combination of members is called a *double torus*.

A repetition of equal semicylindrical mouldings, springing from a plane or cylindrical surface, is called *reeds*.

The *cima recta*, and *cima reversa*, are called in joinery *ogee*. The former is called *ogee*, and the latter *ogee reversa*.

Ovolo has already been defined in our article CIVIL ARCHITECTURE.

A *quarter round* is the fourth part of a cylindrical surface, but has no quirk on either side.

JOY. [*joie*, Fr.] *In mythological painting and sculpture.* This quality is found represented on many ancient medals, generally holding a bough or branch of a tree, with which it was customary to adorn the buildings, both public and private, on any occasion of rejoicing. To indicate the desire that joy should be durable, one sometimes finds an anchor between the hands of the figure; while, in other instances, it presents a crown and a rudder.

JUDGMENT. [*jugement*, Fr.] *In all the arts.* The quality of distinguishing propriety and impropriety. When the artist has made choice of a subject, or outline of a plan (in which act, by the by, he must be guided by the selfsame faculty), it is necessary that he should have recourse to his judgment to dictate the filling up of the details so as to produce the greatest effect or utility. The property of judgment or *taste* (for, as regards art, these words are almost synonymous), is to a certain extent the gift of nature. It is, however, in common with every other mental qualification, capable of cultivation and improvement by reflection and study of the best models.

JUPITER and JUNO. *In the mythology of art.* See MYTHOLOGY.

JUSTICE. [*justitia*, Lat.] *In the mythology of art.* According to Winckelmann, the earliest Greek artists represent Justice without a head. On a medal of the Emperor Galba, she appears with a pair of scales, held exactly even. In other instances she holds a palm branch in her hand; occasionally a thunderbolt, sometimes an eye.

The poets describe Justice to have been the daughter of Jupiter and Themis, and say that she lived on earth during the golden age; but the wickedness of man-

kind drove her to heaven in the brazen and iron ages, where she was placed in the zodiac, becoming the constellation Virgo. Her flight to heaven, when the world grew vile and corrupt, is described by Virgil, but more fully by Aratus, in one of his finest digressions. A passage in Petronius, on the breaking out of the civil wars, describes her as discomposed, with her hair all loose and disordered. The most general method of depicting this goddess, and that which still obtains, is, holding a sword in one hand, and a pair of scales in the other, having her eyes bound with a fillet.

K

KALOS. [καλὸς, Gr. beautiful.] *In sculpture and engraving.* This word is very often found inscribed on Greek vases, &c. probably to indicate their supposed perfection. In many cases, however, it is joined to a proper name, giving rise to a speculation that the vase was dedicated to some particular individual.

KERAMOS. [κέραμος, Gr.] *In modelling and sculpture.* Earth which is tenacious and malleable when moist, but hardens on exposure to the sun or fire. It is used in the construction of vases, bassi rilievi, cornices, &c. as well as that of bricks and tiles, and indeed all works the substance of which is commonly distinguished by the term of *terra cotta.*

KERAUNOSCOPEIAN. [κεραυνὸς, a thunderbolt, and σκοπέω, to behold.] *In archaiology.* A machine used in the theatres of the ancients, by means of which they imitated the hurling of a thunderbolt, a thing particularly necessary in their dramatic representations, which frequently ran on the mythological exploits and appearances of the heathen divinities. They had also another machine, consisting of small stones rolled upon pieces of bronze, the sound of which resembled thunder. These were placed at the back part of the scene.

KEYSTONE. [*key* and *stone.*] *In architecture.* The highest or centre stone of an arch, which being narrower towards the bottom than the top, serves to press together the others, and to consolidate the whole. A projection is usually given to it, and it is often ornamented either according to the order of architecture used in the building to which the arch belongs, or after the taste of the designer. The keystones of the triumphal arches of the Romans were embellished with allegorical sculptures, and figures applicable to the subject. That of Titus is one of the most beautiful and most richly adorned that yet remain standing.

KITCHEN. [*kegin,* Welsh, *cuisine,* Fr.] *In architecture.* That part of the offices of a building where refreshments are prepared. It is mostly, in town houses, in an underground floor, and always, for obvious reasons, placed by the architect as far as possible from the apartments appropriated to the use of the family.

Millin speaks quite rapturously of a kitchen in the Chateau de Rainci; "it is," says he, "a vast and lofty hall, the walls of which are garnished with delft earthenware, and brackets, supporting the busts of Apicius, Lucullus, Bechamel, and other famous patrons of the culinary art. Around is ranged a grand gallery, with balustrades, from which one might overlook the labours of the cooks, and applaud their efforts, without interfering with them." This is truly French, in point of description, but we suspect many an English *gourmand* would relish a similar privilege to that lastmentioned. We believe, indeed, that there are in existence, in several old mansions (Arundel Castle, for instance) in this country, kitchens similarly constructed.

L.

LABARUM. [Λάβαρον, Gr.] The royal or imperial standard used by Constantine and other Roman emperors, before whom it was wont to be carried in war. It was generally magnificently adorned with gold and precious stones. It is doubtful whether this ensign was or was not used by the Greeks; Visconti is of opinion that it was, and adduces several *bassi rilievi* on which a similarly shaped standard appears. It was certainly, however, most frequently used by the sovereigns of the lower empire, who usually had inscribed on it a monogram of Christ.

The form of the labarum somewhat resembles a cross. It consists of a long

pike, with a piece of wood fixed on transversely at a certain height. On the upper part, which rises above this transverse piece, it was customary to affix either the Roman eagle, or a crown composed of some precious metal.

LABORATORY. [*laboratoire*, Fr.] *In architecture.* A chamber, or collection of several chambers on the same floor, properly fitted up with the various utensils used in the interesting pursuit of chemistry.

LABOURED. [from *labor.*] *In all the arts.* Any work which bears the marks of constraint and hardness of style. Opposed to free, graceful, flowing. This term may often be justly applied to copies after the great masters.

LABYRINTH. [*labyrinthus*, Lat.] A building whose numerous passages and perplexing windings render the escape from it difficult and almost impossible. There were four very famous among the ancients; one near the city of Crocodiles, or Arsinoe; another in Crete; a third at Lemnos; and a fourth in Italy, built by Persenne. That of Egypt was the most ancient, and Herodotus, who saw it, declares that the beauty and the art of the building were almost beyond belief. It was built by twelve kings, who reigned at one time in Egypt, and was intended for the place of their burial, and to commemorate the actions of their reign. It was divided into twelve halls or palaces, or, according to Pliny, into sixteen, or, as Strabo mentions, into twenty-seven. These halls were, according to the relation of Herodotus, vaulted. They had each six doors opening to the north, and the same number to the south, all surrounded by one wall. The edifice contained three thousand chambers, one thousand five hundred in the upper part, and the same number below. The chambers above were seen by Herodotus, and astonished him beyond conception, but he was not permitted to see those below, where were buried the holy crocodiles, and the monarchs, whose munificence had raised the edifice. The roofs and walls were encrusted with marble, and adorned with sculptured figures. The halls were surrounded with stately and polished pillars of white stone, and, according to some authors, the opening of the doors was artfully attended with a terrible noise like peals of thunder.

The labyrinth of Crete was built by Dædalus, in imitation of that of Egypt, and it is the most famous of all in classical history. It was the place of confinement for Dædalus himself, and the prison of the minotaur. Our readers are no doubt familiar with the fable of Theseus, who was one of the youths sent by the Athenians to be devoured by this monster; but who, having achieved his destruction, obtained egress from the labyrinth, through means of a clue of thread furnished him by Ariadne, the daughter of Minos, king of Crete, for that purpose.

According to Pliny, the labyrinth of Lemnos even surpassed the others in splendour and magnificence. It was supported by forty columns of uncommon height and thickness, and equally admirable for their beauty and grandeur.

Modern travellers are still astonished at the noble and magnificent ruins which appear of the Egyptian labyrinth, at the south of the lake Mœris, about thirty miles from the ruins of Arsinoe.

Mela, 1, c. 9; Plin. 36, c. 13; Strab. 10; Diod. 1; Herod. 2, c. 148; Virg. En. 5, v. 588.

We have elsewhere (see ARCHITECTURE), given another account of the labyrinth of Egypt, which will be found to differ in some particulars from the above. All statements, however, concur in representing it to have been a structure of surpassing magnitude and grandeur, and when we consider the remote—nay, almost fabulous age, in which it is said to have existed in full splendour, it ceases to be remarkable that its details have not been consistently related.

LACERNA. [Lat. from λαχερὸν, Gr.] *In ancient costume.* A sort of mantle which was worn over the toga or tunic. It was at first only used among the soldiers, but at length became common. It was of different materials, according to the season: in winter of thick wool, in summer of thin and light coloured cloth. They attached to it a hood, which covered the head and shoulders, and might be worn or not at pleasure.

LACONICUM. [Lat.] *In architecture.* One of the apartments of the ancient baths, so called from its having been first used in Laconia. See BATH.

LACRYMATORY. [Fr. *lacrymatoire*, from *lachryma*, a tear, Lat.] *In archaiology.* A vessel supposed by some antiquaries to have been devoted to the reception of tears in honour of the dead, a purpose to which the circumstance of an eye being sculptured at the bottom of it, together with the shape of its neck and mouth, seems to give some colour. Others, however, assign to it the equally useless but

less sentimental office of containing water to sprinkle the ashes of the deceased. It was found in the tombs of the ancients.

LACTARIUM. [Lat. strictly meaning a *dairy-house.*] *In architecture.* A place indicated by a column *(lactaria columna)*, in the Roman herb-market, where foundlings were brought and supplied with nourishment.

LACUNARIA. [Lat.] *In architecture.* Panels or coffers in cielings, or in the soffits of cornices. These are frequently ornamented—sometimes with paintings, sometimes with carved work.

LACUS. [Lat.] *In archaiology.* A vat or great vessel into which the wine ran after it was pressed, and from which it was poured into smaller receptacles. These vessels were often richly sculptured, and a dance of bacchanals was, appropriately enough, a common subject; an instance of which appears in the basso-rilievo, engraved in *Le Musée Pio-Clémentin*, tom. 4. pl. 29.

This name was also applied to the public reservoirs of Rome.

LAGOBOLON. [λαγὸς, a hare, and βάλλω, I throw, Gr.] *In archaiology.* An inverted staff which the sportsmen were wont to throw adroitly at the animal they were pursuing, even when at full speed, in order to ensnare its legs, which they gave to the dogs when it was caught. This instrument was chiefly used in the hunting of hares, whence the derivation of the word.

LAMINÆ. [Lat.] Thin plates of metal, one coat laid over another.

LAMPADEPHORIA. [Lat. λαμπαδηφορία, Gr.] *In archaiology.* A play in which they ran about with lamps. See DADUCHUS.

LAMPADODROME. [λαμπὰς, a lamp, and δρόμος, a race, Gr.] *In archaiology.* This was the name given at Athens to the race by young men, each of whom bore a lamp in his hand in their public games. He who first arrived at the goal without his lamp being extinguished obtained the prize.

LAMPADISTS. [*lampadistes*, Fr. from the same derivation as the former word.] *In archaiology.* Thus were designated those young men who had gained prizes in the course of the lampadodrome. Caylus, in the first volume of his *Recueil*, has published a monument found among the ruins of ancient Athens, and which had been raised, without doubt, in honour of these victors.

LAMPS. [λαμπὰς, Gr.] *In modelling and sculpture.* It was not until a late era that much attention was given to this very elegant part of the household conveniences of the ancients. Indeed, the lamp had generally been considered as a monumental accompaniment merely, and this notion tended to deaden the interest which would otherwise have been excited with regard to its shape and varieties.

The first person who is known to have published a collection of lamps is Fortunio Liceto, an Italian, whose chief design appears to have been to prove the possibility of the existence of inextinguishable or rather perpetually burning lamps. Pietro Santi Bartoli, a countryman of his, afterwards published at Rome, in the year 1691, the collection of Bellori; but these engravings are exceedingly ill executed, and unfaithful, and it is more than suspected that Bartoli indulged himself *ad libitum* in adding to and what he conceived embellishing the proportions of his originals. He evidently regarded all these lamps as being merely sepulchral. Passeri, however, another Italian, published, at the instigation of the academy of Pesaro, a collection of three hundred and twenty-two lamps which he possessed in his museum. In the prolegomena, at the commencement of the first volume, he speaks in general of antique lamps, and was the first who arranged them into three classes—lamps used in the temples, domestic lamps, and sepulchral lamps.

All of the abovementioned collections, however, have been surpassed in beauty and interest by that of Portici: the sixth hall of that museum is entirely filled with lamps and candelabras discovered in the houses of Pompeii and Herculaneum. Representations of these were published in 1792 in ninety-three copper-plates, exclusive of vignettes. They form the 9th vol. of the Antiquities of Herculaneum. We find there represented and explained upwards of two hundred lamps and candelabras of bronze and terra-cotta. Six of these lamps in bronze, the same number in terra-cotta, six candelabras, and two pots to hold the oil, were presented by the late King of Naples to the Empress Josephine, then Madame Buonaparte, and are perhaps still at Malmaison. Still more beautiful specimens, however, were procured to ornament the splendid cabinet of our countryman, Mr. Townley; and the cabinet of the National Library of France also possesses a great number, the larger part of which have been described in the collections of Caylus and Montfaucon.

The ancients appear to have very early acquired the practice of using lamps, though in various ways and in different degrees of approximation to the specimens

above referred to. The use of oil was not perhaps known to the Romans in very remote ages, although the Greeks unquestionably were acquainted with it, as appears from several passages in Herodotus. We find, indeed, the figure of the lamp sculptured and engraved on many of the most ancient Greek vases. It is with a lamp that Mercury, as depicted on one of these, lights Jupiter, who is represented scaling with a ladder the chamber of Alcmena.

Baked earth was the substance of which the earliest of these useful articles were compounded; but subsequently we find them wrought of various metals—of bronze more particularly. Aristophanes makes mention of an artifice used by certain merchants, who put a quantity of lead into the inside, thus to increase the apparent weight of the bronze and consequent value of the lamp. It is curious to trace, in remote antiquity, vestiges of these little *finesses de commerce*, the art of practising which has by no means degenerated in these our latter days.

A few ancient lamps of iron are also extant; but these are rare, either because that metal was little used for the purpose, or on account of its more ready destruction in the ground. There are four specimens in the museum of the King of Naples at Portici; where there is likewise one specimen of a lamp in glass. It is entirely solid, and in one single piece.

Record has also been made of lamps formed of the precious metals. Pausanias mentions a golden one which was in the temple of Minerva, and St. Augustine speaks of lamps of silver: no antique of either kind, however, has reached modern times.

The testimony of Pliny, St. Austin, and others have led many to believe that the ancients had the invention of perpetual lamps; and some moderns have attempted to find out the secret, but hitherto in vain. Indeed, it seems no easy matter to find out either a perpetual wick or perpetual oil. The curious may read Dr. Plot's conjectures on the subject in the Philosophical Transactions, No. 166, or in Lowthorp's Abridgment, vol. iii. p. 636. But few, we believe, will give themselves the trouble of searching for the secret, when they reflect that the credulity of both Pliny and St. Austin was such, that their testimony does not seem a sufficient inducement to us to believe that a lamp was ever formed to burn fifteen hundred or a thousand years; much less is it credible that the ancients had the secret of making one burn for ever.

The lamps or candlesticks made use of by the Jews, in their own houses, were generally put into a very high stand on the ground. The lamps supposed to be used by the foolish virgins, &c. in the gospel were of a different kind. According to critics and antiquaries, they were a sort of torches made of iron or potter's earth, wrapped about with old linen, and moistened from time to time with oil, Matt. xxv. 1, 2. The lamps of Gideon's soldiers were of the same kind. The candlestick with seven branches placed in the sanctury by Moses, and those which Solomon afterwards prepared for the temple, are said to have been crystal lamps filled with oil, and fixed upon the branches.

Among the Romans, also, it was customary to have the lamp either depending from the cieling or placed on a stand in the room, since the use of tables was not common to them, and their attitude, in studying, as well as at repast, was a half recumbent one, holding their scroll or tablets before them on their knees. These stands were often highly ornamented. The commonest form of them was a tripod with lion's feet, from which sprung sometimes the shaft of a column, according to one of the orders of architecture, the disk placed to receive the lamp forming the capital.

These vessels were generally ornamented with mythological or allegorical subjects, and their shape varied greatly. Sometimes, it was a simple disk with a hole in the circumference through which to pass the wick, and another in the middle to pour the oil into. At other times, they presented the appearance of a boat. Occasionally their extremity terminated in two or three divisions, according to the number of beaks: but it would be endless to attempt to pursue these details. Inscriptions were likewise often found placed upon them.

It is not perhaps generally known, that the custom of public illuminations on occasions of national rejoicing was common to the Romans. On the birth-days of their princes, on great religious solemnities, &c. they suspended their lamps at the windows. Juvenal and Perseus both make mention of this usage.

The motive for the ancient practice of placing lamps in sepulchres has been speculated on in a variety of ways. One of the most ingenious, and perhaps the most satisfactory, is that it was allegorical of the cessation of mortal life, of the sepa-

ration of the soul, which the ancients regarded us an emanation of fire. On some sepulchral lamps we find sculptured the figure of the butterfly, in allusion no doubt to the equally cheerful and elegant imagination of the escape of the spirit, in a more aerial semblance, from its chrysalis state. The early Christians adopted in their monuments this pagan usage, together with many others, and the lamp has been found in the tombs of saints and martyrs and of distinguished men who embraced Christianity. In their instances, it was no doubt meant to be still more illustrative of that divine flame by which they were inspired, and whose inward light guided them through the many savage persecutions heaped on the primitive followers of our holy faith.

We cannot conclude this article without alluding to the exquisite specimens of the shapes of the ancient lamps to be found in Mr. Wedgwood's exhibition rooms in St. James's Square. The refined classical taste of that gentleman has rescued these delicious fragments of antiquity from the grasp of the mere antiquarian, and by means of his "so potent art" has multiplied them in endless copies for the delight and utility of his countrymen.—By the by, we take this opportunity of assuring any of our readers who may not be acquainted with the place, that they will find an hour very well disposed of in rambling through those rooms, filled as they are with the most elegant articles of every-day utility (borrowed from antique proportions) of Mr. Wedgwood's peculiar manufacture.

The principal works to be consulted on the subject of lamps are those already quoted, of Liceti, of Bellori, and of Passeri: *Antichita d'Ercolano*, vol. ix. Lucerne: *Une Dissertation sur une Lampe antique trouvée à Munich en* 1753, written by the Prince de St. Sevère on the question of inextinguishable lamps: and the preamble of the description of two antique lamps found at Nismes, in the second volume of Millin's *Monumens Inédits*, from which work this article is in a great measure extracted.

LANCE. [*lancia*, Lat.] *In archaiology.* An offensive weapon, worn by the ancient warriors and cavaliers, in the form of a half pike. The lance consisted of three parts—the shaft, or handle; the wings; and the dart.

Pliny attributes the invention of lances to the Etolians; but Varro and Aulus Gellius say this instrument is Spanish; whence others conclude that the use of it was borrowed by the people of Italy from the Spaniards. Diodorus Siculus derives it from the Gaulish, and Festus from the Greek λογχη, which signifies the same.

The lances used in the times of chivalry were made of a soft and light wood, such as ash or elm. The well-known instrument called by this name, and used in modern European armies, differs in point of construction, as need hardly be observed, from that above described.

LANDING. [from the verb *to land.*] *In architecture.* That part of a staircase which is level and without steps, serving to connect one flight with another. These divisions, or resting places, afford convenient and graceful opportunities for the introduction of something ornamental—as, for instance, a clock or bust.

LANDSCAPE. [*landschape*, Dutch.] *In painting and engraving.* The view or prospect of a country extended as far as the eye can reach. This to an artist, as need scarcely be observed, is one of the richest, the most agreeable, and the most fruitful of subjects. In fact, all the productions both of nature and art enter into this species of composition—all appertain to the studies of the landscape painter. The solitude and horror of rocks; the coolness and freshness of groves; the bloom and verdure of meadows; streams rapid or tranquil; the extent of vast plains; the misty vapour of distance; the varieties of trees; the peculiar effects of clouds, with their gorgeous hues,—all these, and a thousand things besides, form his materials, and put to proof his ability.

We shall not, in this place, enlarge on the present subject, but refer the reader for a fuller treatment of it to our articles DRAWING and PAINTING.

LANDSCAPE GARDENING. This branch of art allies itself very closely both to painting and architecture. It requires a just and comprehensive eye, and a hand skilled in planning and distribution of parts. Landscape or picturesque gardening is so much the work of fancy, and so much depends on the situation, or what the celebrated Mr. Brown was wont to term the capability of the place (which word *capability* was afterwards, from his frequent use of it, engrafted upon his cognomen), that no specific regulations can be advanced concerning it. All that can be expected is a few loose hints, from which the man of taste may improve according to circumstances.

The satisfaction we aim at, in laying out gardens, is now justly founded on the principles of concealed art, which appears like nature; but still, whether ingenious

contrivances and decorations (altogether artificial) should be so completely laid aside as they are, deserves consideration. The works of the statuary might still be introduced with effect, if well executed and placed in proper situations. A terrace as a boundary is now seldom formed, but in some situations such an eminence might in several respects be agreeable.

An ingenious arguer, indeed, in an article called "Walks round London" in the Literary Pocket Book for 1822, decidedly objects to the present fashion of laying out this kind of gardens in what is called a picturesque, or wild, or natural manner, this being, in his opinion, "by no means an improvement on the stateliness of the old English method, which is an imitation of the Dutch without its clipped conceits.

"To say nothing," proceeds this author, "of the absurdity of being industriously negligent, of making arrangements for accidental effects, or of cultivating little domestic wildernesses, a garden is perfect in proportion as it possesses every thing that art, in contradistinction to the untamed caprices of nature can do for it,—wide and level terraces, clear perspectives drawing to a minute point,

"——————— shades
High roof'd, and walks beneath, and alleys brown,"

fountains, statues, shapely groves, trim arbours, smooth-shaven lawns, &c. (We are speaking, of course, of gardens on a large scale of many acres.) Were it only for the sake of keeping the keenness of our enjoyment alive for the mighty irregularities of Nature, we would wish to have no imitation of them in gardens. Distinction is in itself a great source of beauty.

"How many things by season season'd are
To their right praise, and true perfection."
Shakspeare.

"In the delight arising from the contemplation of uncultivated scenery there is something of melancholy: the mind is elevated, expanded, and tasked in speculation. But in a garden we seek recreation bodily and mental; we enter it idly, and are disappointed if we do not find in it luxury and repose. In open Nature there are many unenjoyable parts,—intricacies, sudden obstructions, and places of difficult access; imitations of all which are to be included in the new system; but in what are stigmatized as formal gardens every portion is dedicated to human pleasure. Nature is trained in happy discipline to be the servant of man.

"In other things we count Art to excel,
If it a docile scholar can appear
To Nature, and but imitate her well:
It overrules, and is her master *here*.
* * * * * * *
Who would not joy to see his conquering hand
O'er all the vegetable world command;
And the wild giants of the wood receive
What law he's pleased to give?"
Cowley.

"The old gardeners were, therefore, right in selecting flat spots in which to lay out their plantations, and where their avenues might stretch away uninterruptedly; for there are few objects in Nature finer than those old-fashioned long perspectives, and few accidental effects more grateful to the eye than remote figures in them, coming, as they must, so palpably in the line of vision, and yet looking so fairy-like in their size and noiseless footfalls. These are vistas, if we may speak profanely, finer than Nature ever made; nor is any inequality of ground equal to the wide and costly terraces of the old style of gardening, or so fit for the promenading of those courtly dames who used to undulate along them in all the triumph of their beauty and brocade. The garden festivities in the pictures of Watteau would lose nearly all their *gusto* were they surrounded by any thing resembling romantic scenery. The careless, amorous air of the gallants, and the soft figures of the ladies, beautiful as they are, would seem impertinent amongst hills and tangled dells; and so would Boccaccio's holiday-party* of "seven honourable ladies and three noble gentlemen," who, in the seclusion of goodly gardens, sing canzonets, and pace dances, and slumber under orange trees, and banquet, and cluster round fountains, and tell the Hundred Tales of the Decameron. Groups such as these require the pervading consciousness, indicated by the character of the garden, and always included by Boccaccio and Watteau, that the mansion, with all its luxuries, is at hand. The ladies must have no fatigue in prospect to daunt the brilliance of their eyes; no chance of brambles or mire to sully the elaborate polish, or discompose the folds of their alluring satins; no dank overgrowth to muffle with cold the tones of their silver voices.

"It has been observed of Milton that he anticipated the present taste of gardening in his description of Eden: but it should be recollected that Eden was *the whole world* to Adam and Eve, not a small spot

* See the delicious inductions to the different books of the Decameron.

enclosed out of it, for the purposes of careless pleasure. Let us see what his taste was when he had to allude to such. It is a part of the sublime invocation in his *Penseroso:*

> "And add to these, retired leisure,
> That in *trim* gardens takes his pleasure."

Without going the whole length of the preference avowed by this writer, we think it will at least be admitted that he has made out a strong case, and put it in a powerful way with an attractive tone. In fact, both manners have their peculiar charms, nor should an attachment to the one necessarily exclude admiration of the other.

If trees are planted injudiciously, the error is a trifle; but if cut down so, the consequence is serious, and has often been sorely lamented. Extirpation ought therefore to be well considered before it is adopted, especially on trees about houses, for many dwellings have been thus too hastily exposed, and deprived of comfortable shelter and shade.

Hilly spots in view of a house should be planted with firs, as fine looking trees, and very hardy. Beech does well on high ground, particularly if chalky. In low ground (not to mention alders, and that tribe), the birch, and even the oak, should not be forgotten, where the wet does not long stand.

Around the house, some shady walks ought always to be provided, by thick planting, if not of trees, yet of flowering shrubs and evergreens, among which the laurel will be found the most useful.

Those who have much space of ground to decorate do well to plant trees and shrubs of every kind, as enlarging the sources of amusement; but if the allotment of space for this purpose is contracted, then, of course, those only should be introduced, which, by their neat foliage, natural symmetry, and gay flowers, may be truly esteemed ornamental.

The walks should always be wide, some inclining to serpentine, and contrived as much as possible on a level, as walking up and down hills can hardly be called pleasure. That they may be extensive, they should skirt the grounds, and seldom go across them. In small pleasure grounds, the edges of the walks should be regularly planted with flowers, and long ones occasionally so, or with dwarf shrubs: and neat sheltered compartments of flowers (every now and then to be met with) have a pretty effect. If the walks are extended to distant plantations of forest trees, every opportunity should be taken of introducing something of the herbaceous flowery kind, which will prove the more pleasing as found in unexpected situations. The outer walk of pleasure grounds and plantations should every here and there break into open views of the country, and to parts of the internal space, made agreeable, if not striking, by some work of art, or decoration of nature.

Water should be introduced in those situations only where it will run itself clear, or may be easily kept so, as likewise in full sight; and some fall of it should be contrived, if possible (with graceful and unstudied effect), for the sake of giving it motion and sound, because a lively scene of this element is always much more pleasant than a dead one. Near some piece of water, as a cool retreat, it is desirable that there should be some building of the summer-house kind; or a simple rustic arbour, embowered with the woodbine, the sweetbriar, the jessamine, or rose.

Before the design of a rural and extensive garden is put in execution, it ought to be considered, or anticipated, what it is likely to prove in twenty or thirty years' time: for it often happens that a design which looks handsome when first planted, and in good proportion, becomes so small and ridiculous in process of time, that there is a necessity either to alter it, or destroy it entirely and so plant it anew. Landscape gardening depends greatly on the form of the ground, and therefore to shape that, is the first object. Too much plane is to be guarded against; and when it abounds, the eye should be relieved by clumps, or some other agreeable object. Hollows are not easily filled; and eminences are mostly advantageous, in the formation of picturesque scenes, in which the general principle of ornamental gardening is now almost universally considered to consist.

In order to plant picturesquely, a knowledge of the characteristic differences of trees and shrubs is evidently a principal qualification. To range the shrubs and small trees so that they mutually set off the beauties and conceal the blemishes of each other; to aim at no effects which depend on a nicety for their success, and which the soil, the exposure, or the season of the year may destroy; to attend more to the groups than to the individuals; and to regard the whole as a plantation, not as a collection of plants—are the best general rules which can be given concerning them.

For several of the foregoing observations, we are indebted to the sensible abstract made of this subject in Watkins's Cyclopædia.

LANTERN or LANTHORN. [*laterna*, Lat. *lanterne*, Fr.] *In optics and architecture.* A contrivance to carry a candle in; being a kind of cover usually made of tin, with sashes of some transparent matter, as glass, horn, &c. to transmit the light.

Different epochs have been assigned for the invention of this instrument. Those who love the marvellous have placed it back even in the fabulous ages, and given the invention of it to Prometheus. All that we can assure ourselves respecting the matter is that its usage is very ancient. Theopompus, a Greek comic poet, together with Empedocles and Agrigentes, are the first who have spoken of this kind of illumination. In the *Antiquités d'Herculanum*, vol. viii. will be found represented a collection of ancient lanterns, one of which, of a round form, was discovered in one of the great roads of Herculaneum, in 1760; and another, 1764, at Pompeii, in the vestibule of a house, by the side of a human skeleton.

The use to which these instruments were put was various. A modern author has stated, without sufficient proof, however, that the games of the Circus at Rome, and the sacred games in Greece were celebrated by this kind of light. Plutarch expressly says, that they were used in augury. It is more certain still that they were common among the military, and were always carried before any troops who had to march by night. These were borne upon the top of a pike, and were constructed of a fashion to throw light only behind them.

Dark Lantern. One with only a single opening, which may also be closed up when the light is to be entirely hidden, or opened when there is occasion for its assistance to discover some object.

Magic Lantern. An instrument used to magnify paintings on glass, and throw their images upon a white screen in a darkened chamber. The lantern contains a reflector, which is so situated as to have the light of a candle in its focus. On the firepart of the lantern there is a thick double convex lens, or a plane-convex (usually called a bull's eye) of short focus. The lantern is closed on every side, so that no light can come out of it but what passes through the lens. In the direction of this lens, there is a tube fixed to the lantern, which has a lateral aperture from side to side; through this a glass slider with the painted small images is moved in an inverted position. The forepart of the tube contains another sliding tube which carries a double convex lens. The effect of those parts is as follows: The thick lens throws a good deal of light from the candle upon the image. And, to increase that light still more, a reflector is very often, but not always, placed on such lanterns; for as the flame is in the focus of the reflector, the light proceeds in parallel lines from the reflector to the lens. The image being thus well illuminated, sends forth rays from every point, which, by passing through the lens, are conveyed to a focus upon the wall, and form the large images.

The *phantasmagoria* is like the magic lantern, only instead of painting the figures on transparent glass, all the glass is opaque, except the figure only, which being painted in transparent colours, the light shines through it, and no light can fall on the screen but what passes through the figure. The screen is very thin silk between the spectators and the lantern, and by moving the instrument backwards or forwards, the figures seem to recede or approach.

Feast of Lanterns in China. A celebrated feast held on the fifteenth day of the first month, and thus denominated from the immense number of lanterns hung out of the houses, and in the streets, the number of which has been reported even to exceed two hundred millions. On this great occasion lanterns of all prices are exhibited, some of which have been estimated at the value of two thousand crowns. Several of their mandarins retrench somewhat daily out of the expenses of their dress, equipage, table, &c. to appear the more showy and magnificent in this favourite embellishment. They are adorned with gilding, painting, japanning, sculpture, &c.

The size of many of these lanterns is represented to be quite huge:—some reach nearly thirty feet in diameter. They are constructed so as to resemble halls or chambers; and two or three such machines together would make a handsome house: so that in China they are able to eat, lodge, receive visits, have balls, and act plays, in a lantern. To illumine them they should have bonfires, but, as that would be inconvenient, they are contented with lighting up in them an infinite number of torches or lamps, which, at a distance, have a beautiful effect. In these they exhibit various kinds of shows to divert the people.

Besides the enormous machines first mentioned, there is a multitude of others smaller, which usually consist of six faces or lights, each about four feet high and one and a half broad, framed in wood, finely gilt and adorned; over these they stretch a fine transparent silk, curiously painted with flowers, trees, and sometimes with human figures; the painting is very extraordinary, and the colours extremely bright; and when the torches are lighted, the appearance is exceedingly striking and lively.

In architecture the word lantern implies a little dome raised over the roof of a building, to give light, and serve as a sort of crowning to the fabric. The same term is likewise used for a square cage of carpentry placed over the ridge of a corridor or gallery, between two rows of shops (as in the Royal Exchange, London), to illumine them.

The lantern, on ship-board, is a well-known machine, of which there are many in a ship, particularly for the purpose of directing the course of other ships in a fleet or convoy: such as the poop and top-lantern.

Laocoon. *In mythological sculpture and history.* A son of Priam and Hecuba, or, according to others, of Antenor or of Capys. Being priest of Apollo, he was commissioned by the Trojans to offer a bullock to Nepture to render him propitious. During the sacrifice, two enormous serpents issued from the sea, and attacked Laocoon's two sons, who stood next to the altar. The father immediately attempted to defend his sons; but the serpents falling upon him, squeezed him in their complicated writhes, and he died in the greatest agonies. This punishment was reported to have been inflicted on him for dissuading the Trojans to bring into the city the fatal wooden horse which the Greeks had consecrated to Minerva, as also for his impiety in hurling a javelin against the side of the horse as it entered within the walls.

In the history of the arts, the Laocoon is a celebrated monument of Greek sculpture, executed in marble by Polydorus, Athenodorus, and Agesander, the three famous artists of Rhodes. This relic of antiquity was discovered at Rome, in the commencement of the sixteenth century, among the ruins of the palace of Titus, and was afterwards deposited in the Farnese palace. Laocoon is represented with his two sons: two hideous serpents are clinging round his body, gnawing it, and injecting their poison, while their gigantic folds envelop also, in the same ruin, the two young men. Virgil has given us the following description of the circumstance:

———. Et primum parva duorum
Corpora natorum serpens amplexus uterque
Implicat, et miseros morsu depascitur artus:
Post, ipsum, auxilis subeuntem ac tela ferentem,
Corripiunt, spirisque ligant ingentibus: et jam
Bis medium amplexi, bis collo squamea circum
Terga dati, superant capite, et cervicibus altis.

This statue exhibits the most astonishing dignity and tranquillity of mind in the midst of the most excruciating torments. Pliny (lib. 66, c. 5) says of it, that it is *opus omnibus picturæ et statureæ artis præferendum.*

"The Laocoon," observes Dr. Gillies, in his History of Greece, "may be regarded as the triumph of Grecian sculpture; since bodily pain, the grossest and most ungovernable of all our passions, and that pain united with anguish and torture of mind, are yet expressed with such propriety and dignity, as afford lessons of fortitude superior to any taught in the schools of philosophy. The horrible shriek which Virgil's Laocoon emits is a proper circumstance for poetry, which speaks to the fancy by images and ideas borrowed from all the senses, and has a thousand ways of ennobling its object; but the expression of this shriek would have totally degraded the statue. It is softened, therefore, into a patient sigh, with eyes turned to heaven in search of relief. The intolerable agony of suffering nature is represented in the lower part, and particularly in the extremities of the body; but the manly breast struggles against calamity. The contention is still more plainly perceived in his furrowed forehead; and his languishing paternal eye demands assistance, less for himself than for his miserable children, who look up to him for help."

Lapidary. [*lapidaire*, Fr.] *In the preparation of gems for sculpture.* An artificer who cuts precious stones. This art is of great antiquity.

There are various machines employed in the cutting of precious stones, according to their quality. The diamond, which is extremely hard, is cut in a wheel of soft steel turned by a mill, with diamond dust, tempered with olive oil, which also serves to polish it.

Lapidary style denotes the style proper for monumental or other inscriptions. See Abbreviation, Inscription.

Lapis Lazuli. This term is derived from the word *azul*, by which the Arabians designate this substance, the only one

among those of the argillaceous kind that has been subjected to the purposes of the graver. It is a species of zeolite, not transparent, and mixed with a small portion of gypsum. The specimens of this stone, which are of a fine blue inclining to purple, have obtained the name of *oriental*; but the pale blue is less esteemed. It is not unusually found variegated with yellow, and white shining veins and speckles. These appearances have given rise to a notion among the vulgar, that there is a mixture of gold and silver with the stone, but they are, in fact, only marcasites.

The lapis lazuli derives its greatest value from furnishing the artist with that beautiful colour known by the name of ultramarine.

This stone is discovered in various countries: those of Asia and Africa, however, greatly surpass, both in beauty and real value, the Bohemian and German sorts, which are too often passed off on the purchaser instead of the former species.

LAPITHÆ. [Lat.] *In the mythology of art.* A people of Thessaly, opposed to the Centaurs, who had sprung from one common stock with themselves. The occasion of their quarrel is fabled to have been as follows. The chief of the Lapithæ met together to celebrate the nuptials of Perithous, one of their number. The Centaurs were invited to partake of this general festivity, which would all have gone off in good feeling and hilarity had not one of the Centaurs, being intoxicated, offered violence to Hippodamia, wife of Perithous. The Lapithæ resented this insult, and the Centaurs supporting their companions, the misunderstanding became universal, and resulted in blows and bloodshed. Hence arose the subject which has been often treated in so masterly a way by the chisel of the ancients, among the most brilliant instances of which are the various admirable friezes to be found among the Elgin marbles.

LARARIUM. [Lat.] *In ancient architecture.* A sort of oratory, or domestic chapel, specially devoted, among the Romans, to the worship of the Lares, or household deities. Every ancient Roman possessed a singular reverence for these family divinities, and kept little images of them. The Emperor Alexander Severus had two different *lararia:* one extremely retired, wherein were deposited the images of his ancestors, also of virtuous princes who had been deified; the other, less private, was devoted to the reception of images distinguished for their superior talent—such, for instance, as Virgil, Cicero, &c.

LARES. [*lar*, Lat. from λαρὸς, Gr. benignant, kind.] *In mythological sculpture.* This word was derived by Apuleius (*De Deo Socratis*) from *lar familiaris*, a kind of domestic genii or divinities worshiped in houses, and esteemed the guardians and protectors of families; supposed to reside more immediately in the chimney corner.

The lares were distinguished from the penates: as the former were supposed to preside over housekeeping, the servants in families, and domestic affairs; and the latter were the protectors of the masters of families, their wives and children. Accordingly the lares were dressed in short succinct habits, to show their readiness to serve; and they held a sort of cornucopia in their hands, as a signal of hospitality and good housekeeping. According to Ovid, there were commonly two of them, who were occasionally represented with a dog at their feet. Apuleius tells us that the domestic lares were no other than the souls of departed persons, who had lived well, and discharged the duties of their station; whereas, such as pursued a different course were vagabonds, wandering about and frightening people, and called *larvæ* or *lemures*. The lares were worshiped under the figures of little marmosets, or images of wax, silver, or earthenware.

The ancients have left various accounts respecting the origin of these deities. Varro and Macrobius say, that they were the children of Mania; while Ovid represents them as the issue of Mercury and the naiad Lara or Larunda.

The victim offered to the lares in the public sacrifices was a hog: in private, they tendered them wine, incense, a crown of wool, and a little of what was left at the table. They also were in the habit of crowning them with flowers, particularly the violet, myrtle, and rosemary. Their symbol was a dog, which was usually represented by their side, on account of its fidelity, and the service it does to man in watching his house.

LARGE. *In all the arts.* See GRAND, STYLE.

LAUREL. [*laurus*, Lat.] *In painting and sculpture.* The laurel, or bay tree, dedicated to Apollo, used in triumphs, and worn by emperors, conquerors, or poets, in garlands. We find it appropriated to this latter purpose constantly on a variety of ancient medals.

LAURENTALIA. *In archaiology.* See ACCALIA.

LAY-FIGURE, or MANNIKIN. *In painting and sculpture.* A figure of wood, the joints of which are made to play with as much ease as possible, for the purpose of affording the artist opportunities to judge of the different positions and effects of the human body. See COSTUME, DECORATION, DRAPERY.

LAZARETTO. [*lazzaretto*, Italian.] *In architecture.* An hospital for the reception of such invalids as are sick of contagious disorders. Each ward in these gloomy receptacles is quite isolated, and in them are guarded, during a quarantine of forty days, the contents of such vessels arriving in the Mediterranean from the Levant as are suspected to be tainted with the plague.

LEAD. [læd, Sax.] *In the arts of statuary, engraving, and numismatics.* The heaviest metal except gold and quicksilver, but the softest of all the metals, and very ductile; it is very little subject to rust, and the least sonorous of all the metals except gold.

Homer makes scarcely any mention of this metal. Although in the heroic ages they no doubt understood how to distinguish pewter or tin from lead, yet it does not appear that the points of difference were very clearly defined, since Homer speaks of each indifferently under the same appellation. He often uses the word κασσίτερος for the pewter or white lead which the Latins denominated alike *stannum* and *plumbum.*

It is pretty certain that both lead and tin were employed in extremely remote ages in the fabrication of arms, and above all, in the ornamental parts of them. Homer also alludes to the practice of putting leaden balls at the end of fishing lines; and without doubt they were acquainted with the method of flattening lead, so flexible, so facile is it in its nature. Caylus has demonstrated that this proceeding was known to the ancient Romans. The custom of writing on lead mounts also into very great antiquity. Frontinus and Dio Cassius assure us that the Consul Hirtius, besieged in Modena, wrote upon a leaf of lead, respecting his situation, to Decius Brutus, who replied by the same means. Pausanias speaks of certain books of Hesiod written upon sheets of lead; and if we may believe Pliny, even public acts were consigned to volumes or leaves of the same material.

The poets make frequent allusion to leaden coins. Ficorini, in his *Piombi Antichi*, has collected and represented a vast number of monuments of this kind. Caylus conceived them to be all Roman; and thus, according to that writer, those even which represent Egyptian divinities, or are inscribed with Greek characters, are yet to be referred to the times of the Roman emperors. The opinion of Ficorini is, that these leaden medals, of which he treats, were circulated in commercial transactions; that they were fabricated for the Saturnalia, and that they were employed as seals; but he imagines, and we think justly, that the extreme malleability of the metal, and its consequent subjection to being falsified, is opposed to the idea of its ever having subsisted as a regular current coin.

Statues of lead are very rare, which is somewhat surprising, since the facility of working in this metal must have been so great, and the ancients had such an attachment, the Romans particularly, for all species of statuary. This circumstance, however, is capable of explanation by the same consideration—namely, the little consistency and easy alteration of the material.

LECTISTERNIUM. [Lat. from *lectus*, a bed, and *sternere*, to dress.] *In archaiology.* A religious ceremony practised at Rome in seasons of public calamity, such as the plague, and the object of which was to appease the gods. This ceremony consisted in a feast which, during several days, was given in the name and at the expense of the republic, to the honour of the principal divinities—such as Jupiter, Apollo, Diana, Ceres, Neptune, &c. They decorated in one of the temples of these deities, and near the altar, a table surrounded by couches or beds, covered with rich trappings, and strewed with flowers, upon which they placed the statues of the gods to whom the festival was dedicated.

According to Titus Livius, the first lectisternium was celebrated at Rome in the year 356 after its foundation. An unhealthy winter having been followed by a spring still more pernicious, a plague sprung up, and a great mortality ensued. The evil being without remedy, the senate decreed a consultation of the books of the Sibyls, and the sibylline duumvirs reported that, in order to conciliate the angry gods, and arrest the progress of the malady, it was necessary to establish a public solemn festival, *of which themselves were to be the directors.* The lectisternium was accordingly set on foot, and every measure adopted which was held characteristic of public festivities. Processions were formed, hymns chanted, convicts released, &c.

&c. Livy does not think proper to state whether these notable means did or did not serve the purpose designed: however, we who live even in the nineteenth century must not be too sarcastic about the credulity of the ancient Romans, when we reflect on the farces which are acted every now and then in Italy and other Catholic countries.

The word *lectisternium* sometimes means the bed itself on which the statue has been described to be placed, and we find it thus represented on a variety of medals, with different figures seated or lying thereon.

LEGEND. [*legenda*, Lat.] *In archaiology.* The motto or words engraved, in a circular manner, round the head of a personage or other representation upon a medal or coin. The meaning of this term is similar to that of an inscription, but the latter relates chiefly to the writing placed in the middle of the coin, while the legend, as we have just observed, surrounds it.

LEGION. [*legio*, Lat. from *legere*, to choose.] *In archaiology.* A Roman regiment of soldiers, consisting of ten companies, or troops, *cohortes*. The number of men was uncertain—now more, now less, as appears by Livy. If, as Calep. reckons, a legion had been companies, each company five bands, and every band in it twenty-five men; then, in the whole ten companies there would be but one thousand two hundred and fifty men; whereas some authors have spoken of six thousand, besides horse soldiers. The head officer was the *tribunus*, or colonel.

The derivation of this word arises from the circumstance of their choosing the young men to be enrolled in the legions by their height and other personal qualifications. We find the names and characteristic emblems of different legions upon a great number both of imperial medals, and of colonial; to account for the former circumstance, we should bear in mind that each Roman *imperator*, or emperor, existed chiefly by the good will and sufferance of the soldiery; while a reason for the appearance of the names, &c. of the legions on colonial medals is to be gathered from the fact of their having been often sent into distant provinces, where they were certain to excite either the love and admiration, or, at all events, the respect of the natives.

LEVEL. [læɒl, Sax.] *In architecture, mensuration*, &c. The state of a surface which inclines to neither side. An instrument wherewith to draw a line parallel to the horizon, by means of which the true level, or the difference of ascent or descent between several places may be found, for conveying water, and other purposes.

There are several instruments in use of this description:—namely, the *air-level*, the *water-level*, the *reflecting-level*, the *pendulum level*, the *carpenter's* or *bricklayer's level*, the *mason's level*, &c.

The *air-level* is that which shows the line of level by means of a bubble of air enclosed with some liquor in a glass tube of an indeterminate length and thickness, whose two ends are hermetically sealed. When the bubble fixes itself at a certain mark, made exactly in the middle of the tube, the plane or ruler wherein it is fixed is level. This application of a bubble of air was the invention of Dr. Hooke.

The *water-level* shows the horizontal line by means of a surface of water or other fluid, founded on this principle, that water always places itself level or horizontally. The most simple instrument of this description is made of a long wooden trough or canal, whose sides are parallel to the base; so that being equally filled with water, its surface exhibits the line of level. This is the *chorobates* of the ancients.

Carpenter's, bricklayer's, or pavior's level consists of a long ruler, in the middle of which is fitted at right angles another broader piece, at the top of which is fastened a plummet, which, when it hangs above the middle line of the second or upright piece, shows that the base or long ruler is horizontal or level.

The mason's level is composed of three rulers, so joined as to form an isosceles triangle, somewhat like a Roman A: from the vertex of which is suspended a plummet hanging directly over a mark in the centre of the base, when this is horizontal or level.

LEVELLING. The art of discovering a line parallel to the horizon at one or more stations, to determine the height or depth of one place with respect to another.

Two or more places are on a level with each other when they lie at equal distances from the earth's centre. A line equally distant, at all points, from that centre is denominated *the line of true level.* Hence it appears that, by reason of the roundness of our globe, that line must be a curve, making part of the earth's circumference, or, at least, being parallel to it, or concentrical with it. The usual manners of levelling (described in the preceding article) are sufficient for laying pavements or walks, or for conveying water to any small distance, &c.; but in operations of a more extensive kind the

difference between the true and apparent level must be carefully taken into account. —This amounts to somewhere about eight inches in every mile, or four and a half for every hundred yards.

LIBERALITY. [*liberalitas*, Lat.] *In emblematical sculpture.* Upon several of the Roman imperial medals, with the epigraph LIBERALITAS, we find this quality (as exercised by the emperor towards the people in grants or distributions of silver or lands), personified by the figure of a female holding in her hand a square tablet, upon which is observed a certain number of characters marking the various sums thus handsomely circulated by the prince to whose reign the coin belongs.

LIBERTY. [*libertas*, Lat. from *liber*, free.] *In allegorical painting and sculpture.* A goddess of ancient Rome, and to whom a temple was consecrated on the Aventine hill, by T. Gracchus, and improved and adorned with many admirable statues and brazen columns by Pollio, and in which was also a gallery for the deposit of the public acts of the state.

This goddess was commonly represented as a woman in white robes, holding a rod in one hand, and a cap in the other. The cap was, according to Valerius Maximus (v. c. 2. l. 8. c. 6), and other ancient writers, a mark of liberty used on all occasions. It, as well as the rod or wand, referred to the customs used by the Romans in setting their slaves free. The rod was held by the magistrates in the performance of that ceremony, and the cap by the slave, even for some period previous. Sometimes a cat is found placed at the feet of the deity, this animal being very fond of liberty and impatient when confined.

The statues of Liberty were numerous among the ancients, as was also its personification on medals. Of the former kind, that in the Aventine temple before alluded to was a conspicuous instance. It had the head crowned, and a sceptre in one hand, while the other held the cap. The former two characteristics, by the by, do not seem to harmonize at all with the general notion of liberty, which is opposed to constraint of all kinds whether real or implied. The emblems of Liberty are met with most particularly upon the medals of Galba, and the reason appears to be that on the death of the infamous Nero, the citizens were full of hope that the republic would be restored, and were seen running in all directions through the streets decorated with the cap of liberty. One of Galba's coins presents a figure of this goddess in an attitude somewhat uncommon. She is represented as standing between two ears of corn, lifting up her hands towards heaven. This is typical of an exhortation to the people to give themselves up to the cultivation of agriculture, since the execrable tyrant was dead who had desolated the face of the country.

LIBURNÆ. [Lat.] *In archaiology.* The name given by the Romans to a species of light vessel, with two sets of rowers, which cut through the water with great rapidity. This name was derived from a nation of Illyria, and the vessel was distinguished by its size and construction, which opposed but little resistance to the liquid element in which it moved.

LICENCE. [*licentia*, Lat. *licence*, Fr.] *In all the arts.*

Licence they mean when they cry liberty.

This quality is personified by modern artists under the figure of a satyr.

As applied to art in general, licence means any thing opposed to the common rules, or to the history of the subject. See HERESY.

LICTOR. [Lat.] *In archaiology.* A serjeant, beadle, macebearer or verger. A consul had twelve of these officers to go before him: they carried each a bundle of rods (for lesser crimes) bound up with an axe (for capital punishment) which they, at the consul's command, inflicted.

LIGHT. [leahr, Sax.] *In painting, drawing, and engraving.* Light ought to be regarded as the cause of colour, because all bodies appear to us coloured only in proportion as they are struck by the light. It results hence that the object which is entirely thrown into shade must necessarily appear black whatever may be its colour at other times when it is struck by rays of light. A plain globe of whatever colour, when illuminated by the sun, will display all possible shades on that side which is exposed to the sun's rays. The point to which the strongest light is directed, will exhibit the strongest tinge of colour, and those points which are altogether in shade will appear quite black. Between these two extremes the natural colour of the globe will exhibit different shades according to its position. The painter must therefore carefully observe the action which the light, as it is more or less strong, produces upon each colour: he should reflect that the force or intensity of the light is produced by two causes: first by its absolute quantity; as for instance, the sun is less brilliant when the atmosphere is loaded with mists and vapours than when the sky is clear and serene. Another principal point, which ought to occupy the attention of the artist, is the

nature or *colour* of light, because it has a great influence on the colour of bodies. He ought also to take equal care to observe the influence of light on the *chiar' oscuro.* A landscape appears altogether different when the light is sensibly changed, and the different objects are seen more or less distinctly. Each scene of inanimate as well as of *animated* nature should be examined by the artist with the greatest attention, under different aspects of the sky, whether the sun is shining, or the sky charged with lowering clouds and vapours. He will thus discover that a very strong light, when the shadows are not relieved by a strong *reflected light,* is against the harmony of the picture, because the bright and the shaded spots then seem at a distance to be blots upon it. Certain methods of disposing the objects will prove to him that a weak light renders the picture dull and heavy, and that a light too violent produces little dispersed clear and sombre masses. The best advice to be given to artists on this subject is to follow the example of Leonardo da Vinci, to write down his observations, and to fix them (if one may so speak) by sketches taken whenever he sees a fine effect of light.

Light is sometimes spread uniformly over all the objects, and at other times the principal and strongest light comes only from one side, while the other is radiated by a much weaker and reflected light. Sometimes the best effect is produced by the light uniformly spread over all the surface of objects: at other times a borrowed light is preferable. There are some subjects for which the latter, or to speak more properly a dead light, is almost absolutely necessary, such as portraits.

An accurate observer will perceive that generally a light from above produces the best effect, not only because it throws into greatest clearness the plan on which the objects are traced, and because the shadows are more shortened, but also because their shapes are more elegant than when the light strikes them in an oblique direction. He will have the same occasion to observe this, when any group which forms by itself a complete picture is illumined in a manner the most advantageous by a light which strikes the principal figure through a narrow opening, in that manner that the other objects are only radiated by a reflected light.

Sometimes a picture receives light in two different ways, which generally produces a bad effect, and this method should therefore be carefully shunned by the artist. In that case only, where a side-light should be too brilliant, another, weaker, might be advantageously introduced from the opposite side.

To these observations on natural effects of light, the artist should add those which are furnished to him by study of the works of the great masters. He will perceive in those of the elder Venetian school all the advantages and admirable harmony of colours produced by a judiciously modified distribution of light and shade. Various effects of light are likewise, in particular, very splendidly exemplified in the masterly productions of Rembrandt.

The reader is referred for further information on this subject to the fourth book of *Trattato dell' Arte della Pittura,* by Lomazzo; to several chapters of the fifth, sixth, and seventh books of *Le Grand Livre des Peintres,* by Lairesse; *Le Traité sur la Peinture,* by Du Puy de Grez; the forty-seventh of the *Considérations sur la Peinture* of Hagedorn; the third section of *L'Académie des Arts du Dessin,* by Prange; the *Dictionnaire de Peinture* of Wattelet at the words *Conférence* and *Lumière,* and that of Sulzer, at the word *Licht:*—together with the various works on Painting of Dandré Bardon, Sir Joshua Reynolds, Felibien, &c.

LIGHTHOUSE. *In architecture.* An edifice built upon a promontory or cape on the seacoast, or upon some rock in the sea, and having a great fire on its top in the nighttime, which, being perpetually attended and kept burning by some trustworthy person, may be seen at a very considerable distance from shore. It is used to direct the shipping on the coast, which might otherwise run aground or steer an improper course when the darkness of the night, the uncertainty of current, &c. might render their point of situation distressingly doubtful. Lamp-lights are, on many accounts, preferable for this purpose to coal fires or candles; and the effect of these may be increased by placing them either behind glass hemispheres or before properly disposed glass or metal reflectors.

The present Eddystone Lighthouse, built by the famous Mr. Smeaton, is the most celebrated edifice of this kind existing.

LIGHTNESS. [from *light.*] *In all the arts.* That property opposed to density, heaviness, or clumsiness. In architecture, a building of airy and elegant proportions; in painting, a picture whose effect is graceful, sunny, or lively. In sculpture, in like manner, the word refers itself to delicate

results of the chisel, such, for instance, as the flying drapery of a statue, the leaves of the Corinthian or composite capital, &c. In drawing and engraving, the meaning of this term may be traced in a similar way.

LIMB. [lim, Sax.] A jointed or articulated part of animals. Any given member.

LIMIT. [*limite*, Fr.] *In archaiology.* This word signifies the bound or extremity which separates one country from another. Solon made a law by virtue of which the different lands were distinguished by a boundary space, five feet in width, which became at length imprescriptible. This disposition was at first adopted among the Romans, but they abandoned it after awhile and substituted a boundary of stone, or sometimes by raising little hillocks. In those lands distributed by the Romans to the colonies, the country was equally divided by limits, which consisted of paths or byways, at certain intervals of which were erected piles of stones, which were held sacred and might not be displaced without crime.

LINEAR. [*linearis*, Lat.] See PERSPECTIVE.

LINEN. [*lineus*, Lat.] *In painting.* We do not possess any proof that the artists of antiquity made use of linen to paint upon before the reign of Nero. Since the revival of art, it has been the common custom to use wood or copper: but in recent times this practice has been laid aside, and coarse linen or canvass again substituted.

LINES. [*linea*, Lat.] This word does not apply to art so much as to geometry. It means, in general, longitudinal extension. It has different significations, according to the object to which it is directed. In architecture, the *line of level* is that parallel to the horizon; that of *declivity*, a right line which goes from one point to another situated lower, &c. The line which, in drawing or painting, terminates an object, is denominated *contour*.

The line of Apelles was for a great length of time the admiration of antiquity. This painter having landed at Rhodes, went to visit Protogenes, a celebrated contemporary artist, whom he knew only by reputation. He did not succeed in seeing him; but having observed in his workshop a large pannel disposed for painting, he left a testimony of his having been there by drawing with one of the colours a line of extreme tenuity. This trait was immediately recognised by Protogenes, who, however, unwilling to be outdone, described a line of still finer proportions with another colour. Apelles returned, and surprised to find himself surpassed, he surrounded the two lines with one of a third colour, the astonishing delicacy and precision of which left no room for further outdoing. Pliny reports himself to have witnessed this wonderful panel, which is said to have been destroyed in the burning of the palace of Cæsar on the Palatine hill.

Many artists, both ancient and modern, have admitted the existence of what they have chosen to denominate the *line of beauty*. The Greeks have left several records of their attempt to establish such a theory, and modern artists have actually published their various sentiments and speculations on the subject. Thus our immortal Hogarth in his *Analysis of Beauty*, sought to prove that this line was formed upon the principle of *undulation* or *waving*. Mengs also found it in a serpentine line; and Winckelmann, in his *Essai sur l'Allégorie*, likewise made a similar choice. But many others have differed from these in various ways; and the matter is altogether of a fanciful nature, rather than one which can be reduced to the test of any thing like argument.

LINTEL. [*linteau*, Fr.] *In architecture.* That part of the door-frame that is across the door-posts over head. Vitruvius styles it *antepagmentum superius*.

LION. [*leo*, Lat. *lion*, Fr.] *In antique painting and sculpture.* The strongest and most magnanimous of fourfooted beasts. The lion was consecrated to Cybele, and we find it sculptured upon many monuments erected to that mysterious deity. Sometimes she is borne upon a lion, at others they draw her car, and occasionally are found standing by the throne on which she is seated.

The poets have been large in their admiration of the magnanimity and clemency of this beast, which has by distinction acquired the title of *royal:* and hence, many princes have been represented symbolically by the figure of a lion. In the sacred writings of the Hebrews, as well as in the mystic language of the ancient oracles this kind of representation is maintained, since the lion has always been considered the emblem of sovereign power and sway.

The coins and medals of the Roman emperors and others of the ancients abound with introductions of this animal; and occasionally we find it used as a symbol of consecration or of eternity with the legend of MEMORIÆ ÆTERNÆ. Several princes, both ancient and modern, have caused the artist to introduce the skin of the lion's head drawn over their own helmet, in

imitation of some of the figures of Hercules.

There remain to us many beautifully executed antique lions. Among the finest is that placed before the Barberini palace; another very fine specimen is to be found in the villa Medicis; a third at Dresden. The two lions of Venice, placed at the entry of the arsenal, are particularly celebrated. These were brought from Athens in the year 1687, when Morosini took possession of that ill-fated city.

LISTEL. [*listeau, listel*, Fr.] *In architecture.* A small square moulding, which serves to crown or accompany a larger, and to separate the flutings in columns. They are also called ANNULETS, ARMILLÆ (bracelets), FILLETS, and BANDS. See those words.

LITHARGE. [*lythargyrum*, Lat.] Litharge is properly lead vitrified, either alone or with a mixture of copper. This recrement is of two kinds;—litharge of gold and litharge of silver. It is collected from the furnaces when silver is separated from lead, or from those where gold and silver are purified by means of that metal. The litharge sold in the shops is produced in the copper works, where lead has been used to purify that metal, or to separate silver from it.

This substance is used by artists to cleanse their oils and render them siccative.

LITHOGLYPH. [λιθος, a stone, and γλύφω, I engrave or sculp.] The art of engraving on precious stones, &c. See ENGRAVING, GEM, GLYPTIC.

LITHOGRAPHY. [λιθος, a stone, and γράφω, I write.] *In the art of engraving.* A little reflection will suffice to show that this interesting invention, of only a few years' date, is calculated to be in many ways of the highest possible utility. The facility with which, through its medium, any thing whatever in the shape of writing or pictorial display can be multiplied is truly astonishing. By means of it the painter, the sculptor, the architect, are enabled to hand down to posterity as many facsimiles of their original sketches as they please. The collector or antiquarian is enabled to multiply his originals, and the amateur the fruits of his leisure hours. The portrait painter can gratify his patron by supplying him with as many copies as he wishes to have of a successful likeness. Men in office may obtain copies of the most important despatches or documents, without a moment's delay, and without the necessity of confiding in the fidelity of secretaries and clerks; whilst the merchant and the man of business, to whom time is often of the most vital importance, can, with similar promptitude, preserve what copies they may require, of their tables or accounts.

The invention of the art of lithography, or engraving on stone, is claimed by a German of the name of Senefelder, who describes it as "a branch of a new method of printing or engraving differing in its fundamental principles from all other methods now in use, and distinguished by the name of chemical printing.

"The chemical process of printing (proceeds this artist) requires that the lines and points to be printed ought to be covered with a liquid, to which the ink, consisting of a homogeneous substance, must adhere, according to its chemical affinity and the laws of attraction, while at the same time all those places that are to remain blank must possess the quality of repelling the colour. These two conditions, of a purely chemical nature, are perfectly attained by the chemical process of printing; for common experience shows that all greasy substances, such as oil, butter, &c. or such as are easily soluble in oil, as wax, bitumen, &c. do not unite with any watery liquid, without the intervention of a connecting medium; but that, on the contrary, they are inimical to water, and seem to repel it. The principal dissolving or uniting liquid for the abovementioned substances is alcali, which, by proper management, forms a sort of soap soluble in water.

"Upon this experience rests the whole foundation of the new method of printing, which, in order to distinguish it from the mechanical methods, is justly called the chemical method; because the reason why the ink, prepared of a sebaceous matter, adheres only to the lines drawn on the plate, and is repelled from the rest of the wetted surface, depends entirely on the mutual chemical affinity, and not on mechanical contact alone.

"It might perhaps be objected that in the other methods (namely, letter-press and copper-plate printing), the colour adheres to the lines which are to be printed from the very same cause; since it is a well known law that water and oil adhere to all bodies in a perfectly dry state. But the case is not the same with fluids and their mutual effect, and this constitutes the essential difference between the former and this new method of printing. A dry plate would every where imbibe the colour; but

the surface of the plate being sufficiently wetted, it takes the colour only on those places that are in a state the reverse of wetness. The repelling, therefore, of the colour from all those places that are to remain blank is the novelty in the whole process.

"It is not however sufficient, in order to print chemically, to make certain spots of the plate greasy, and others wet; water of itself being, when applied to most of the substances used for plates, of insufficient power to act as a means for repelling the colour from all the places in which it ought not to be. In siliceous or porcellaneous substances, such as glass, china, and clay slate, pure water might be sufficient; but then the slight power of adhesion, and tenacity of greasy ink, when applied to these plates, is another obstacle to the taking a considerable number of impressions from them: however, in case of necessity, this obstacle may be removed, in part, by the use of very hard substances, which soon dry; such, for instance, as linseed-oil varnish, mixed with a great deal of sulphate of zinc. But in those substances which powerfully attract the ink, as, for instance, metals, wood, calcareous stone, artificial stone, paper, &c. it is necessary to prepare the surface of the plate so, that in those places which are to remain blank, it may reject, as if from aversion, the colour, and consequently entirely change its nature.

"The chemical process of printing is not only applicable to stone, but likewise to metals, &c. and *lithography*, therefore, is only to be considered as a branch of the more general chemical process of printing.

"Amongst the different materials applicable to this new method of printing, the calcareous slate occupies the first place. It possesses not only a strong tendency to combine with unctuous substances, and to retain them obstinately, but it likewise possesses the power of absorbing bodies of a different nature, such as aqueous fluids: so that the stone, thus impregnated with them, will repel oleaginous and unctuous bodies.

"This excellent quality, together with the cheapness and facility with which these stones could be procured in Bavaria, and the advantage of their being easily rendered fit for use, determined me to overlook the few defects or inconveniences they presented, such as their heaviness and occupying considerable room, and their not unfrequent difference in quality, and induced me to use them, as the principal material for my various experiments, the successful result of which has now established this my invention as a new art.

"Since the art of lithography has risen to considerable celebrity, attempts have been made to discover the same species of stone, or one resembling it, and possessed of the same qualities, in other countries; and in England, France, and Italy, as well as of late in Prussia, these attempts have been successful." The author, however, speaks in another part of his book, of *composition stones*, which he describes as admirably calculated for the purposes of lithographic engraving.

"Since the year 1809 (says M. Senefelder) I have devoted all my leisure to the improvement of lithography, and to the reducing of all operations in its different branches to the most simple and certain principles. Thus I have, by numberless experiments, succeeded, for instance, in simplifying the manner of transferring from paper, upon which drawing or writing is previously executed with prepared ink; and particularly in transferring leaves of old prints or old books to stone, by which in the most easy manner lithographic stereotypes may be obtained. Such progress has also been made in printing in colours, that I produce not only coloured prints, but likewise copies so like oil paintings, that it is impossible to discover any difference between these copies and the original pictures. I farther discovered a new method of printing playing cards, tapestry, and even calico, by means of which two persons in one day can print two thousand pieces of the size of folio sheets, even if the pattern should consist of a hundred or more different colours."

He describes the following methods as having been introduced by him during this period:—the engraved chalk manner, the dotted manner, some new kinds of aquatint, the transformation of the raised or relief manner into the engraved, and *vice versa*, and a new method of writing printed characters, by means of a machine, for splendid works.

The art of lithography, rude like all others in its commencement, has unquestionably been advanced to a very high degree of beauty and polish. The present writer has seen many engravings in this style possessing a high finish, an exquisite softness, and abundant spirit, and he cannot help noticing, as an instance, a collection of anatomical engravings, of a recent date, published at Paris, but after whose

drawings he does not on the instant remember.

It is curious to trace an invention of such magnitude and of so extremely popular a nature to its earliest stage. M. Senefelder's first idea was to engrave letters in steel, stamp these matrices in forms of hard wood, and thus make a sort of stereotype composition, from which impressions could have been taken in the same manner as from a wooden block. But he was compelled to relinquish this plan, for want of proper tools and sufficient skill in engraving on steel.

He represents the next plan which occurred to him as having been to compose a page of letter-press, in common printing characters, to form a cast of this composition in a soft manner, and by taking another cast from this, to obtain a sort of stereotype frame. This experiment, he says, did not wholly disappoint his expectations. He composed a kind of paste of clay, fine sand flour, and pulverized charcoal, which, mixed with a little water, and kneaded as stiffly as possible, gave a very good impression of the types; and in a quarter of an hour became so hard that he could take a perfect cast from it in melted sealing-wax by means of a hand-press. He subsequently applied printing ink to this stereotyped block in the usual manner, thus obtaining a perfectly clear impression from it. By mixing a small quantity of pulverized plaster of Paris with the sealing wax, the composition became much harder than the common type-metal of lead and antimony; and to the invention of thus forming a sort of stereotype tables, nothing was wanting but a few preparatory improvements, and a small stock of types; but the ingenious artist, finding these difficult to procure, abandoned this plan, and adopted another which he had just hit on, and which was no other than to learn to imitate the printed characters very closely in an inverted sense: to write these with an elastic steel pen on a copper-plate covered with etching ground, to bite them in, and thus to take impressions from them.

At this period of the invention, the author's attention seems to have been fortuitously directed to a fine piece of Kellheim stone, which he had purchased for the purpose of grinding his colours. It occurred to him that by covering this plate with a peculiar ink he had composed, he should find it as serviceable as copper or tin plates for his exercises in writing *backwards:* but having until then seen nothing but very thin plates of this stone, he had no conception that he should be enabled to take impressions from them, as they would not resist, without breaking, the pressure necessary for that purpose: however, being informed by a stone-mason that he could procure these plates from one to eight inches thick, he began to imagine the possibility of using them for the impressions likewise; but before this could be done, it was absolutely necessary first to discover a method of giving a higher polish to the stone, or to prepare a colour that could be better wiped off the stone than the common printer's ink; for the application of which the stone never admits the requisite polish; and M. Senefelder supposes this to be the reason why, the stone having not long before been used by engravers for etchings, as a substitute for copper, the attempt did not prove successful.

Having invented a colour calculated to answer his purpose, M. Senefelder pursues his interesting experiments until a circumstance of a very trivial nature appears to have let in fresh light upon him, and to have given actual birth to the new discovery.

"I had just succeeded in my little laboratory in polishing a stone plate, which I intended to cover with etching ground, in order to continue my exercises in writing backward, when my mother entered the room, and desired me to write her a bill for her washerwoman. I happened not to have even the smallest slip of paper at hand, as my little stock had been entirely exhausted by taking proof impressions from the stones; nor was there even a drop of ink in the inkstand. As the matter would not admit of delay, and nobody was at hand to send for a supply of the deficient materials, I resolved to write the list with my ink (prepared with wax, soap, and lampblack) on the stone which I had just polished, and from which I could copy it at leisure.

"Some time after this I was just going to wipe this writing from the stone, when the idea all at once struck me to try what would be the effect of such a writing with my prepared ink, if I were to bite in the stone with *aqua fortis;* and whether, perhaps, it might not be possible to apply printing ink to it, in the same way as to wood engravings, and so take impressions from it. I immediately hastened to put this idea in execution; surrounded the stone with a border of wax, and covered the surface of it, to the height of two inches, with a mixture of one part of *aqua fortis* and ten parts of water, which I left

standing five minutes on it; and on examining the effect of this experiment, I found the writing elevated about a tenth part of a line, or the hundred and twentieth part of an inch. Some of the finer, and not sufficiently distinct lines had suffered in some measure, but the greater part of the letters had not been damaged at all in their breadth, considering their *elevation;* so that I confidently hoped to obtain very clear impressions, chiefly from printed characters, in which there are not many fine strokes.

"I now proceeded to apply the printing ink to the stone, for which purpose I first used a common printer's ball:—but, after some unsuccessful trials, I found that a thin piece of board, covered with fine cloth, answered the purpose perfectly, and communicated the ink in a more equal manner than any other material I had before used. My farther trials of this method greatly encouraged my perseverance. The application of the printing ink was easier than in the other methods, and I could take impressions with a fourth part of the power that was requisite for an engraving, so that the stones were not at all liable to the danger of breaking: and, which was of the greatest moment to me, this method of printing was an entirely new invention, which had occurred to nobody before."

An ingenious practiser in this art has favoured us with the following information:

The size of the stone used for lithographic purposes must vary in proportion to the nature of the work it is destined to receive, and the thickness of it in proportion to its size: two inches, or from that to two inches and a half, is a fair average thickness. These stones are not calculated to bear rough usage, since, in despite of their hard quality, they are liable to break. Chalk drawings require the best and hardest stones, and the coarser sort of pen and ink drawings may be executed upon those of irregular surface and firmness. All must be carefully polished before they are in any way fit for use: the method of doing which is with a substantial ruler of brass or iron called a straight edge. This is passed over the surface of the stone in all directions, and if it touches each portion equally, the artist may feel confident that his material is so far good. Any hollows, however, that may be found on the surface may be removed by rubbing it with a coarse-grained sand or pumice stone.

The stone thus prepared must be put on a steady table (with a horizontal inclination), and thinly covered with fine sand, mixed with soap and water. Another stone being laid upon the first, and moved up and down in different directions, fresh sand and water must be now and then applied, by which means the surfaces of both stones are levelled and polished at the same time. This, however, must be cautiously managed; since, in moving one upon the other, if the upper stone should unfortunately exceed the surface of the under one, the former will become concave and the latter convex: the relative situations of the two stones should therefore be occasionally changed. At intervals, the stones should be examined with the ruler to ascertain their advances to perfection; and after awhile the hand of the artist will become sufficiently experienced for that purpose. Various chemical processes have been introduced wherewith to prepare the stone for the due reception of the ink.

Two great styles, or branches of the art of lithography have obtained:—namely, the *elevated* and the *incised* or *engraved:* in the first style, all those parts of the surface of the stone that are covered by a greasy ink resist the action of the acid poured over the whole, and by virtue of which the other parts of the surface become corroded; they stand, therefore, higher than the latter, as being elevated above the plane surface of the stone.—In the second, or incised style, each of those traced lines, which are to yield the impression, is engraved into the surface of the stone by means of a sharp needle, or bitten into it by the action of an acid.

Each of these styles has its peculiar advantages; the elevated manner allows of more promptitude in taking the impressions, and of a great many more of them being taken; while the incised manner admits of a higher degree of delicacy and expression.

The following is an enumeration of the different instruments principally necessary in lithography:

A *steel pen: brushes* for cleaning, biting in, and colouring the stones: *etching needles;* and a *drawing and copying machine.*

We cannot conclude our brief mention of this novel, useful, and curious style of engraving without earnestly referring our readers (and particularly every student in art), to M. Senefelder's valuable and interesting work entitled, *A Complete Course of Lithography*, published by Mr. Ackermann, to which we are indebted for a considerable part of the foregoing information.

LITHOLOGY. [λίθος, a stone, and λόγος, knowledge.] *In the history of art.* The science of understanding the varieties of precious stones, very necessary both to the antiquary and gem fancier. We may also include under this term an acquaintance with the different kinds of marble, an acquirement of much greater utility, and which every artist should obtain in some degree.

LITHOSTROTON. [λίθος, a stone, and στρωνυμι, to pave.] *In archaiology.* We apply this Greek term to a species of mosaic, consisting of pieces of marble of a certain size. The Romans designated it by the words *opus sectile.* This kind of mosaic had very probably some analogy to that now called *Florence mosaic.* Another variety had the name of *opus tesselatum,* or *vermiculatum.*

LITTER. [*litière,* Fr.] *In archaiology.* A sort of vehiculary bed. A noble couch or chair wherein the Roman patricians were wont to be borne about by their servants, particularly on solemn public occasions, such as triumphal pomps or religious ceremonies. These litters were mostly provided with an awning or canopy to preserve their occupiers at once from the heat of the sun and the impertinence of the general gaze.

LITTERATA. [Lat. from *litera,* a letter.] *In the history of antique art.* We give this name to such monuments as are accompanied by inscriptions.

LITTLE. [lɪtel, Sax. *leitels,* Gothic.] *In all the arts.* This word is commonly used in a depreciating sense, implying that the artist has failed in producing the desirable effect.

LIZARD. [*lisarde,* Fr.] *In ancient sculpture and engraving.* An animal resembling a serpent with legs added to it. The most curious varieties of this animal are the crocodile, the chamelion, and the salamander. The natural phenomenon of the chameleon changing its colour according to being placed in different positions of light is well known. The salamander has been reported to be able to endure fire without injury. This notion, however, is unfounded, and probably proceeded from its possessing a power of exuding, in any state of irritation, a white and glutinous substance, which would obviously tend to render the application of heat less immediately destructive to it.

We find these animals often represented on ancient coins and medals.

LOBBY. [*laube,* German.] *In architecture.* An open space surrounding any range of seats or chambers, or the boxes of a theatre. A small hall or waiting room. Also, an entrance into any principal apartment, when there is a considerable space between that and a portico or vestibule, and the length or dimensions will not permit it to be regarded as a vestibule or antechamber. See ANTECHAMBER, HALL, VESTIBULE.

LOCALITY. [from *local* (*localis,* Lat.) pertaining to a place.] *In all the arts.* That which relates to any peculiar nation, people, town, &c. Some artists, and those perhaps the most illustrious, have divested themselves of all nationality of this kind, as, for instance, the divine Raffaelle, not to mention the great names of antiquity—the artists of the Apollo, of the Venus de Medicis, of the Laocoon, &c. On the other hand, very eminent men have submitted to the trammels of locality, and amongst the chief of them may be cited Rubens, whose figures are all completely Dutch, more particularly his women. The same observation will hold respecting almost every practiser of the Flemish school, not only with reference to their human figures, but to the description of landscape painted by them; nor are the Italian masters exempt from it: we will instance Paul Veronese, almost the whole of whose individual figures bear the appearance of noble Venetians. Exquisite specimens of perfect freedom from this kind of locality are to be found in the landscapes of Claude Lorraine, of the Poussins, of Salvator Rosa, &c.

This term applies, and, as will be obvious, should most completely apply to portrait-painting. Here the artist should be careful not only to transmit to his canvass the peculiar features of his subject, but to preserve the costume and general air proper to the country of which he may be a native. Here, however, there is likewise a vicious locality to be guarded against—namely, mannerism in the artist's own style, or certain affectations of dress, &c. which, although probably they may please at the moment, soon become obnoxious to ridicule.

LOCK. [loc, Sax.] *In architecture.* A well known instrument used for fastening doors, chests, &c. and generally opened by a key.

In remote times they had not acquired the knowledge of this kind of safeguard, and were without any other means of security than what was afforded by a cord, the knot of which did the office of our locks. The inconvenience and unsatisfactory nature of this fastening soon, as may be imagined, became apparent: and the first substitution for it consisted of a trans-

verse wooden bolt, which slipped, no doubt, into rings of iron. To this succeeded the *Lacedæmonian lock*, which was of a construction somewhat more complicated, and in course of time, through various improvements, this necessary instrument acquired that degree of perfection which is attached in the present day to the invention of the *Bramah* lock.

LODGE. [*logis*, Fr.] *In architecture.* A small house in a park or forest. Any small house appendant to a greater: as *the porter's lodge.*

LOGEION. [λογεῖον, Gr.] *In architecture.* The Greeks designated thus the *proscenium*, which the Latins expressed by the word *pulpitum.* See PROSCENIUM.

LOSANGE. [Fr.] *In the art of construction.* Millin defines this to be a figure of four sides, with two acute and two obtuse angles.

LOTUS. [λοτός, Gr.] *In mythological history and sculpture.* "The lote tree; of the fruit whereof if a man do eat, straight he forgets his own country: a pleasant fruit like a cherry, of the bigness of a bean, and yellow, which grows in Afric."

Thus says a quaint but excellent old writer: and it is certain that no plant was so highly esteemed as this was by the ancient Egyptians, or so much used by them: and the various errors committed in treating of it prove how advantageous a knowledge of natural history must be to every cultivator of the fine arts.

The fabulous history of the lotus tree has of course been long since exploded; but the honours and veneration which it has received, not only in Egypt but also throughout the East Indies, render it a curious object of interest and research.

Four trees have been entitled lotus by the ancients: and five other plants likewise received the same name. These latter are: *nymphæa lotus*, *nymphæa nelumbo*, *nymphæa cærulea*, *arum colocasia*, and *trifolium melilotus:* the first mentioned of these is white; its exterior petals alone being a little rosy at their extremities; the second is of a flesh colour; the third blue. The leaves of the *nymphæa lotus* are orbicular and a little indented; those of the *nymphæa nelumbo* are perfect in their outline and generally closed; while the leaves of the *nymphæa cærulea* are somewhat sinuous, as appears by the representations given of it by M. Savigny.

The lotus rose, or *nymphæa nelumbo*, is very faithfully depicted upon the Palestrine mosaic, of which Barthelemy has afforded an explanation in the *Mémoires de l'Académie des Inscriptions et des Belles Lettres.* The fruits, the flowers, the leaves, are all to the life. They float on the surface of the water, upon a lake on which several vessels appear to be glancing about during a fete. This delineation reminds one of a passage of Strabo, who says that, for diversion, it was customary to go in boats on the lakes, which were covered with "beans," and that they "sheltered" themselves with the leaves of this plant.

The reader who is desirous of further information on this interesting topic may obtain it by reference to the following works, independently of engravings of the ancient monuments which bear its figure, of the classic writers, or of general treatises on botany.—*Mémoire sur le Lotus*, by Mahudel, in the *Mémoires de l'Académie de Belles Lettres*, tom. 2; *Mémoire sur les différentes espèces de Lotus*, by M. Desfontaines, in the *Mémoires de l'Académie de Science*, and in the *Journal de Physique; Antiquitatum Botanicarum, specimen primum*, auctore Sprengel, Halæ, 1794, 4to.; *Description du Nymphæa Cærulea*, by Julius Cæsar Savigny, in the *Annales du Musée d'Histoire Naturelle*, tom. i. p. 366, and *Observations sur le Lotus d'Ægypte*, by Raffeneau Delille, tom. i. p. 372.

LUSTRATION. [*lustratio*, Lat.] *In archaiology.* A sacred ceremony used among the Greeks and Romans, and accompanied by sacrifices. They purified thus their towns, fields, flocks, houses, soldiers, &c. These lustrations were performed either by fire, burning of perfumes, or by the sprinkling of water upon the objects to be purified.

Upon a coin of an ancient Roman family, entitled Postumius, we find a man robed, and holding a laurel branch in one hand, with which it was customary to perform the sprinkling. The lustration of infants, among the Romans, is represented in a curious manner upon a medallion of Lucilla, wife of the Emperor Lucius Verus, which was published by Vaillant. We observe Lucilla herself, standing, holding a branch of laurel. A priestess is on her knees beside a stream or basin of water, near which is also a child half naked.

The following works may be consulted on this subject.—Lomeier *de Lustrationibus*, of which the second edition, with additions, appeared at Zutphen in the year 1700, in 4to. The sixth chapter of the work of the Jesuit Peter Taffin, *de Anno seculari*: the eleventh chapter of the work *de Sacrificiis*, by J. Saubert; Jer. Hoffman, *De Lustrandi Purgandique veterum Gentilium Ritibus circa Aquam observatis*, Wittenberg, 1660; J. U. Haffner, *De Aquâ lustrali veterum Gentilium*, Jena, 1687; Christ.

Clementinus, *De Lustratione Hominum per Ignem*, Havniæ, 1692; Magn. Dau. Omeis, *De Expationibus apud veteres Gentiles Usitatis*, Aldorf, 1700; Two Dissertations by Joh. Godof; Leschnert, *De Lustrationibus veterum Gentilium præcidaneis*, Witteb. 1709.

LUSTRE. [Fr.] A kind of chandelier suspended by a cord or chain from the cieling, which was the fashion in which the Romans used their lamps. This elegant piece of furniture is often introduced in public places, such as churches, theatres, &c. and is sometimes made of bronze, sometimes of gilt metal, and sometimes (its most beautiful material) of crystal.

LYSICRATES. [Gr.] *In architecture.* The choragic monument of, commonly called the Lantern of Demosthenes. See CHORAGIC.

M

MACEDONIA. [Μακεδονία, Gr.] *In ancient modelling and sculpture, and in the history of the arts.* A large country of Greece, containing several provinces. It is now all subject to the Turks. Macedonia is represented upon various medals with a whip or rod in her hand, either because her inhabitants paid particular adoration to the sun, which is, itself, often thus figured on ancient coins, or because the country produced excellent horses, or, finally, because the men were celebrated as skilful charioteers. The medals of this nation bear also the club of Hercules, from whom the Macedonian monarchs boasted themselves to be derived:—after the era of these princes, while Macedonia existed in the shape of a republic, we find likewise engraven the prow of a vessel, the head of Silenus, a winged thunderbolt; and sometimes a trident, a vase, a lyre, or a cavalier mounted. The costume of this people resembled that of the other Greek provinces, with the exception of a longer cloak and the horns of a ram, which Lysimachus and other successive kings wore on their casque, and which was a type or allegory of puissance.

MACHICOLATED. [*machicoulis*, Fr.] *In architecture.* Having a kind of jutting or projecting gallery, with a parapet, as was common in many old chateaux and castles.

MACHINE. [*machina*, Lat. from μηχανή, a warlike instrument.] Any thing, speaking generally, which has power sufficient to raise or stop the motion of a heavy body.

MACHINERY or MECHANICS. [*mechanica*, Lat. from the same Greek derivation.] That branch of practical mathematics relating to the laws of motion and moving powers, their nature and their effects as shown by machinery. This term is applied with like justice to the doctrine of the equilibrium of powers, more properly called statics, and to that science which treats of the generation and communication of motion constituting mechanics strictly so called. By a knowledge of this science (the degree of which knowledge is always demonstrative of the civilization of a country) the utmost improvement is made of every power and force in nature; and the motion of the elements (water, fire, and air) rendered administrable to the various uses of life: for, however weak the force of man appears to be when unassisted by this art, yet with its aid there is hardly any thing above his reach.

The nature of this work does not admit of our enlarging on the present subject; although it enters into almost every convenience of civilized life, and should be thoroughly understood by the architect or builder; we shall therefore briefly enumerate the various mechanical powers, as generally arranged, give a condensed description of each, and refer to the classification made by M. Millin in his *Dictionnaire des Beaux Arts.* The six mechanical powers are as follow: *viz.* the lever, the pulley, the wheel and axis, the inclined plane, the wedge, and the screw. These, however, may in point of simplification of arrangement, be reduced to two; since the pulley and wheel are, in fact, only assemblages of levers, while the wedge and screw are inclined planes.

The *lever* is the simplest of all machines, and is merely a straight bar of wood, of iron, or any other substance supported on and moveable round a prop called the *fulcrum.*

In the lever there are three circumstances requiring especial attention. 1. The fulcrum, or prop, by which it is supported or on which it turns as an axis. 2. The force to raise and support the weight. 3. The resistance, or weight to be raised and sustained.

The points of suspension are those at which the weights actually are, or from

which they hang freely. The power, or force, and the weight are always supposed to act at right angles to the lever, except it should be otherwise expressed.

The *wheel and axis* may be regarded as a sort of perpetual lever of which the fulcrum is the centre of the axis, and the long and short arms are the diameter of the wheel and the diameter of the axis. From this it is evident that the larger the wheel and the smaller the axis, the greater must be the power of this machine; but then the weight must rise slower in proportion.

The *pulley* is a small wheel turning on an axis, with a drawing rope passing over it; the small wheel is usually denominated a sheeve, and is so fixed in a box or block as to be moveable round a pin passing through its centre.

The *inclined plane* is of very essential utility in mechanics. It is applied to the purpose of rolling up or down heavy bodies, such as casks, chests, &c. and is formed by the placing either of boards or earth in a sloping direction. The force wherewith any given body descends upon an inclined plane is to the force of its absolute gravity, by which it would descend perpendicularly in open space as the height of the plane is to its length.

The *wedge* is the fifth mechanical power, and may be considered in the light of two planes equally inclined and joined together at their bases.

The sixth and last, called the *screw*, cannot properly be denominated a simple machine, since it is never used without the assistance of a winch, or lever, to help turn it: but it then becomes a compound engine of prodigious force either in pressing the parts of bodies closer together, or in raising great weights.

Compound Machines. At length it has been established, in theory, that any one of the mechanical powers is capable of overcoming the greatest possible resistance; yet, in practice, if used singly for producing very great effects, they would become frequently so unwieldy and unmanageable as to render it impossible to apply them. For this reason, it is commonly found more satisfactory to combine them together, by which means the power is more easily applied and many other advantages obtained.

M. Millin, after referring to the six kinds of simple machines already enumerated, proceeds to observe that it has been proposed to establish as many *classes* of machinery, which he describes and explains as follows:

First Class. Those machines which serve to raise and sustain weights; such as the lever, the roller, the pulley, with its varieties,—the crane, the jack, the screw, &c.

Second Class. Those which are used for the fabrication of different things in less time, greater number, or a more commodious manner than otherwise. Such are all the various kinds of mills, mints, knitting and spinning engines, &c.

The *Third Class* includes all sorts of hydraulic machines, and the *Fourth*, those which are applied to the measurement of time, &c.

The *Fifth Class* comprises all that variety of machines employed directly as tools in the multifarious species of manufacture—weaver's looms, turner's lathes, spinning-wheels, and so forth. This class differs from the second, inasmuch as, whilst that comprises those machines which work by virtue of their own elaborate construction, and require little other human aid than the impetus which sets them moving, the instruments of the fifth class demand the constant attention and constant exertion of the artificer.

In the *Sixth Class* are ranged all the machines which act upon the air, together with those relating to the science of physics.

MACHINIST. The constructor or director of machinery. This term is now almost confined to the person occupying this post in a theatre.

MÆANDER. A celebrated river of Asia Minor, rising near Celænæ, and flowing into the Ægean Sea. It is celebrated among the poets for its windings, said to amount to no less than six hundred, and from which all obliquities have received the name of *Mæanders*. These sinuosities of track are said to have given Dædalus the first idea of his famous labyrinth.

Upon ancient vases and vestments the mæander or line revolving round itself was made very abundant use of.

MAGISTRATE. [*magistratus*, Lat.] *In archaiology.* The towns subjected to the Roman power were in the habit of erecting statues to the magistrates sent to preside over their institutions.

MAGNIFICENCE. [*magnificentia*, Lat.] *In sculpture and engraving.* Cochin has combined in one the two emblems given to this quality by Ripa, representing Magnificence by a female figure of noble physiognomy, splendidly habited and crowned with gold, holding in her left hand the plan of a sumptuous edifice, and resting the right on an image of Pallas. The ancients seem not to have personified Magnificence; but Liberality, an almost synonymous quality, is often found represented upon Roman medals.

MAISON CARRÉE. [Fr. a square house.] *In architecture.* The name of a famous relic of antiquity at Nismes in France, supposed to have been originally built for the purposes of a temple.

MALLEATOR. [Lat. a beater with a hammer.] *In archaiology.* An inscription published by Gruter, p. 1066. No. 5, presents this word, which means a sort of mint-master, whose function was to strike the coins with a mallet.

MALTHA. [*μάλθα*, Gr.] *In ancient construction.* A kind of cement or glutinous substance, by virtue of which several different bodies were attached to each other. According to some authorities it consisted of pitch and tallow, or hog's grease, with lime dusted upon it. The same term also implied a liquid brimstone.

MAN. [man, mon, Sax.] *In painting, sculpture,* &c. The general qualifications assignable to the representation of the male part of the human race may be regarded as moral dignity, physical power, majesty of carriage and appearance, and intellectuality of countenance: while to the more delicate female sex the artist should attach the prevailing expression of gentleness, regularity of feature, slenderness of make, and a certain confiding air, which constitutes one of the most winning charms of that lovely portion of our species.

> "For contemplation he and valour formed,
> For softness she and sweet attractive grace."

MANIPULUS. [Lat. from *manus*, a hand, and *plenus*, full, meaning literally a handful.] *In archaiology.* A small band of Roman infantry, which in the times of Romulus formed the tenth part of a legion. There was an ancient ensign of the same name, which was commonly borne before these troops of soldiers, and which originally consisted of a bunch of herbs or grass, but was afterwards changed to the figure of some animal.

MANNER. [*manière*, Fr.] *In all the arts.* Appertaining to the particular character, style, or school of any given work of art. See COMPOSITION, STYLE.

MANNERIST. See LOCALITY.

MANNERS. [from *manner*.] *In all the arts.* The law which Horace, and before him Aristotle, and in fact, which reason itself lays down, for the poet is alike deserving of attention, and the strictest attention from the artist:—namely, to avoid any charge of anachronism, and to make every object introduced in his performance harmonize with the era proper to the subject he has chosen, and with the costume, habits, and *manners* of the people among whom his scene is placed. Thus, a female of Ionia should be delineated with a voluptuous gracefulness, while the representation of a Spartan woman requires the expression of energy and even manly courage. A certain degree of licence is undoubtedly to be conceded to the artist; but it would be insupportable to see instances of refinement and luxury introduced in representations of an age or of a people decidedly simple or poor; or to observe a Lacedæmonian general covered with gold in a picture referring to that era when the precious metals were prohibited in Lacedæmon. Instances may be abundantly mentioned in illustration, but we trust our meaning will already be sufficiently clear. See COSTUME.

MANSARD-ROOF. *In architecture.* A roof of peculiar construction, named after its first practiser Julius, or as some say, Francis Mansard, who used it upon all his principal buildings. Before the time of either of these architects, however, this kind of roof was employed by the Abbé de Clagny in the old palace of the Louvre.

MANSION. [*mansio*, Lat. from *maneo*, to remain.] *In architecture.* The house of the lord of the manor: any considerable building used as the residence of a nobleman or gentleman.

The first use of this term seems to have been among the Romans on occasions of giving rest to their troops, for brief periods, during their marches. Camps were constructed for these purposes; which camps were generally denominated *mansiones*.

MANTLE. [*mentell*, Welsh, *manteau*, Fr.] *In costume.* An ample cloak, or vestment, without sleeves, worn over the other parts of the dress. Among the Romans, peculiar names were appropriated to different varieties of this garment: such as, DIPLOIS, LACERNA, PALLIUM, PALUDAMENTUM, PEPLOS, TOGA, &c. See these words.

MANUSCRIPT. [from *manus*, a hand, and *scriptus*, written, Lat.] *In the history of art.* The science of deciphering manuscripts is proper to literary history and antiquities; but there are certain ancient relics of this description which refer themselves to the history of art; such, for instance, as present miniatures, vignettes, or other species of illumination.

MARBLE. [*marbre*, Fr. *marmor*, Lat. from *μάρμαρον*, a shining stone.] *In statuary and architecture.* A peculiar and very beautiful kind of stone dug out of quarries or pits, in which it is frequently found in large blocks or masses. It is of a texture so hard and compact, and at the same time

so fine in grain, that it takes, without difficulty, a very high degree of polish. The varieties of this stone are immense, and its uses both in sculpture and architecture truly eminent. Some species of marble are of one simple colour, as white or black; others present surfaces variegated with clouds, stains, waves, and veins: all, however, are opaque with the exception of the white kind, which when cut into thin pieces, becomes transparent.

Beds or strata of marble are common to most of the mountainous countries of Europe. In our own, Derbyshire has afforded the greatest quantities. But Italy is the part of Europe which produces the most valuable marble. The black and the milk-white marble, coming from Carara, a town in the Duchy of Massa, are in particularly high estimation.

In his work on the Origin of Laws, Goguet advances an opinion that Homer was ignorant of the existence of marble; but this notion, which appears to us to rest on slender foundation, has been combated by Millin and others, who maintain that the Greeks of the Homeric age not only understood the existence and nature of marble, but also the arts of polishing and working in it. In fact, the use of marble both in building and sculpture originated with that great people, the earliest who adopted the practice of adorning and enriching their edifices, whether public or private, at once with taste and splendour. In general, they were in the habit of appropriating that marble which was found in the most immediate vicinity of the temple or other building or statue they were about to rear; but if any stone of a finer or harder quality was found in a distant quarry, means were adopted to procure it. The Athenians principally employed in the construction of their grandest works the Pentelican marble and that of Mount Hymettus, which were preferred for their delicate whiteness. The quarries of Phrygia furnished a white marble diversified with various colours. The temple of Apollo at Phigalia, in Arcadia, was built with a gray marble tinged with rosy veins: while from Nisa, in Asia Minor, a variety was drawn chequered with veins of a cerulean tint. In short, as we before observed, the different species are almost numberless.

The Romans unquestionably borrowed the art of polishing and working in marble from the politer Greeks. Metellus Macedonicus, contemporary of Mummius, the conqueror and destroyer of Corinth, is reported to have built the first marble temple at Rome. After that period, however, the use of this kind of stone became quite general throughout Italy; although they do not seem to have been aware that veins of excellent marble were indigenous to their own country, since, in order to adorn their most celebrated buildings they despoiled the temples of conquered Greece of their columns, friezes, &c. and likewise imported huge blocks not only from Greece, but from several parts both of Asia and Africa.

The island of Paros was particularly eminent among the nations of antiquity for its exquisite marbles—from the production of which Strabo reports that it received the appellation of *excellent*. Virgil speaks of Mount Marpessus in this island, from which the principal blocks were extracted. According to an expression of Propertius, the Parian marble demanded the chisel of Praxiteles. An epigram in the Anthology leads us to believe that it was of Parian marble Phidias constructed the statue of Nemesis for the victory of Marathon.

The beauty of coloured marble consists chiefly in the mixture of colours, just as that of white or black marble does in its perfect purity. These species are generally confined to the uses of architecture; although there are busts in existence framed from them.

The writers who treat on the marbles of the ancients are:—Ernesti, Winckelmann, De Launay (*Minéralogie des Anciens*), and Caryophilus (*De Marmoribus Antiquis*). Besides these, any approved work on natural history—particularly on mineralogy and lithology may be consulted. See ARCHITECTURE, CRUSTA, SCULPTURE, STATUE, &c.

Polishing of Marble. This operation is performed by first rubbing it thoroughly with a freestone, or sand, until the strokes of the axe are worn off; then with pumice-stone, and afterwards with emery.

MARCH OF THE DEITIES. *In archaiology.* The ancients, in all their representations of the superhuman powers, and even of heroic men or demigods, paid great attention to their step or gait. They held a grave, steady, and at the same time light step to be indicative of dignity and even of a spiritual nature. Occasionally, as on a medal of Antoninus representing the advance of Mars to Sylvia, the figure appears rather to glide over the surface of the earth than to tread upon it. The Belvedere Apollo has a similar character of step or walk. The foot of the deity scarcely presses the ground. The Greek artists

always gave wings to their divinities when they wished to express the action of unusual speed.

Marcia Aqua. *In ancient architecture.* Name of one of the aquæducts of Rome. See Aquæduct.

Market-place. [formerly written *mercat*, from *mercatus*, Lat. a mart or place of trade.] *In architecture.* A place built in any city or town for the general reception of dealers of every description, and the other inhabitants, who resort thither, more particularly on a given day or days of the week (called market-day) for the purchase and sale of commodities. These structures are generally built and roofed in a very slight and unadorned manner.

Marmora Oxoniensia. Ancient marbles with a chronicle of the city of Athens inscribed on them, many years antecedent to the birth of Christ, and presented by their proprietor, Thomas, Earl of Arundel, to the University of Oxford. See Arundelian Marbles.

Marmorarii. [Lat.] *In archaiology.* The name given to those who cut and worked out the marbles. The same name was also often extended to the artists who chiselled them. The marmorarii formed a *sodalitium*, or brotherhood, which had its schools, its privileges, patrons, and protecting deities.

Marmoratum. [Lat.] *In architecture.* A plaster of pounded marble, or mortar of lime and marble beaten together. Varro makes mention of this stucco, which was employed in walls, terraces, and various other works.

Marquettry. [*marqueterie*, Fr.] *In the art of inlaying.* A curious species of work composed of different coloured pieces of hard fine wood, fastened, in thin layers, on a ground, and occasionally enriched with other matters, such as tortoiseshell, ivory, tin, or brass. There is a separate kind of marquettry made, instead of wood, of glasses of various colours; and another still, wherein nothing is used but precious stones and the richest marbles: but these are more properly denominated mosaic work.

The art of inlaying is very ancient, and has been supposed to have passed from the east to the west, as one of the spoils brought by the Romans from Asia. Indeed it was at that time executed with great simplicity, nor did it reach even a tolerable degree of excellence till the fifteenth century, among the Italians.

Until John of Verona, who flourished at the same time with Raffaelle, the finest works of this kind were only black and white, such as we call *morescoes;* but that devotee, who possessed some genius for the fine arts, stained his wood with dyes or boiled oils, which penetrated them. He proceeded no farther, however, than the representing of buildings and perspectives, which require no great variety of colours. They who succeeded him not only improved on the invention of dyeing the woods, by a secret which they discovered of burning them without consuming (which served particularly well for the shadowing), but they had likewise the advantage of several fine new woods of naturally bright colours, which were imported from the newly discovered continent of America. With these assistances the art is now capable of imitating almost any thing.

The ground whereon the pieces are to be ranged and glued is ordinarily of oak or fir well dried; and to prevent warping, it is composed of several pieces glued together. The wood to be used, being reduced into leaves, of the thickness of a line, is either stained with some colour, or made black for shadow; which some effect by putting it in sand extremely heated over the fire, others by steeping it in lime-water and sublimate, and others in oil of sulphur. Thus coloured, the contours of the pier are formed according to the parts of the design they are to represent. This last is the most difficult part of marquettry, and that wherein most patience and attention are requisite. See Crusta, Emblemata, Incrustation, Mosaic, &c.

Mars. *In mythological painting and sculpture.* The son of Jupiter and Juno, according to the Greeks, but of Juno alone, as Ovid tells the story: for she being displeased that Jupiter should have a daughter (Minerva) without female assistance, consulted with the goddess Flora how she herself might bring forth a son. Flora accordingly told her of a certain herb or flower, the touch of which rendered her pregnant with Mars.

This god is always represented with his usual attributes, the helmet and spear, which he does not quit even when going on his amours. He had several, of which that with Rhea was one of the most celebrated among the Romans. In a rilievo belonging to the Mellini family at Rome, relating to the birth of Romulus, Mars is descended and moving towards Rhea, who is asleep. On the reverse of the medal of Antoninus, he is represented as suspended in the air, just above the vestal virgin *.

* By this medal Mr. Addison explained Juvenal's expression *pendentis dei* (Sat. xi. v. 107), which

There is perhaps no picture of Mars going to war extant, but this is particularly described by the poets, who give him a number of attendants adapted to the god of slaughter, or as it is more frequently called, of the art of war.

The temples of Mars were not numerous among the Greeks, but the more warlike Romans were fond of keeping him ever in view, their favourite deity, whom they esteemed as the patron of their city. The most celebrated temple was built by Augustus after the battle of Philippi, and dedicated to Mars the Avenger. His altars were frequently stained with the blood of the horse and of the wolf, and magpies and vultures were offered to him on account of their greediness and rapacity. The chariot of Mars is depicted as drawn by furious horses, driven by two furies, named by the poets Flight and Terror.

Mask (*masque*, Fr.) *In costume.* These disguises were very common among the ancients, and were more particularly used in the performance of their theatres. It is unfortunate for the present subject that we are not fully possessed of their [illegible], but that they were in the practice of [illegible] their theatrical masks may be inferred from several of their monuments still existing, among which may be enumerated the bas-reliefs, wherein the heads of Egyptian priests are found masked with the resemblance of the lion, the dog, &c.

By the report of the celebrated historians, it would appear that an actor surnamed Thespis was the first who introduced masks of low comedy; and we read in Pausanias that Aeschylus generally put into use hideous and frightful masks, to which Euripides added serpents clinging round the head, which among the ancients was wholly enclosed by the mask.

The material of these disguises was not always the same. Those originally constructed were probably nothing more than the bark of trees; afterwards, they employed leather with linen or cloth bands; subsequently, wood was used, which gave way in turn to a composition of paper and plaster.

The mask was likewise worn in several ancient religious ceremonies and feasts of

[illegible]

the Isiac [illegible], as also in the [illegible] Saturnalia. In a feast of Bacchus, engraved on a Greek vessel, engraved in the *Antiquité expliquée*, tom. 2, pt. 2, p. 88, we find the [illegible] masked, and four masks lying under a table. The superb antique vase which was in the *Musée Napoléon* at Paris, is adorned with several masks, among other accessories of the feasts of Bacchus. A beautiful vase in the collection of the late Mr. Hope, published by Mr. Tischbein, presents three young men, two of whom wear masks resembling satyrs, the third holds one in his hand.

The allegorical personifications of Tragedy and Comedy are always furnished with appropriate masks, and this constitutes one of the [illegible] of the fine portrait of [illegible], by Sir Joshua Reynolds, a lovely [illegible] who is represented as courted both by the tragic and comic muse. In the scenic [illegible] of the ancients, and [illegible] of the earlier moderns, female masks were worn by boys, who played women's parts, it being then considered indecent for a member of that sex to appear in person on the public stage. Now, however, the arrangement seems to be completely altered, as witness the frequent theatrical introduction of women in the garb of boys.

The following authorities will be found useful for reference on the present subject. [illegible] Ficoroni, *De Larvis scenicis et Figuris comicis antiquorum Romanorum*, Roma, 1750; Nicholas Boindin, *Discours sur les Masques et les Habits de Théâtre des Anciens*, in the *Mémoires of the Académie of Inscriptions of the French Institute*, vol. 4, p. 132; Savaron, in his *Notes on Sidonius Apollinaris*, 4to, 1609; *L'Antiquité expliquée*, by Montfaucon, 3rd and 4th vols. and 3rd vol. of his Supplement; *Recueil d'Antiquités* of Caylus, vols. 3 to 5; *Museo Pio Clementino*, vols. 1, 3, 4, and 6, Rome, 1782, and after; the *Pitture d'Ercolano*, vol. 3, p. 17 to 40; vol. 4, p. 15 to 40; vol. 5, p. 189 to 200; vol. 6, p. 117 to 120; and vol. 5, p. [illegible]. To conclude, Flögel, in his *Histoire du Comique Grotesque*, has treated in a curious and interesting manner of the various masks and disguises used by different nations in their feasts and revels.

Mass. To mass, (*massa*, Ital.) *In drawing and painting.* This term is applied to the various effects of light and shade, which

are generally said to be introduced in masses. See ACCIDENTAL, CHIAROSCURO.

MASSIVE. [*massif*, Fr. from *mass.*] *In architecture, sculpture*, &c. Heavy, full, solid. This term is one of commendation, or otherwise, according to the nature of the work respecting which it is used. Thus in speaking of an abutment, a wall, the pier of a bridge, &c. the architect is complimented by the application of this term: whereas, the precise contrary is generally the case, when it is employed in speaking of a portico, an arch, column, or a roof.

MASTER. [*meester*, Dutch, *maître*, Fr.] *In all the arts.* A professor of either of the fine arts, who gives lectures thereon to students. In another, and more general sense, any distinguished practiser of art, whose works are sufficiently excellent to have attained him an undying reputation, and to render his performances referred to as models for style and execution by the young artist. Without the existence of the works of the great masters, the arts would still be in their infancy.

MASTIC. [*μαστίχη*, Gr.] A kind of resin exuding from the lentiscus tree. It is of a pale yellow, or white hue, and principally brought from the island of Chios in drops or tears. It has an agreeable smell, especially when heated by fire.

In architecture. This substance enters into the composition of a kind of cement or mortar, intended to fill up crevices in walls or in wood work, or cracks in stones. Lapidaries also find it particularly serviceable for the latter purpose. The ancients appear to have possessed several compositions of this kind, which they applied to various architectural purposes.

MASTICOT. [*massicot*, Fr.] *In the art of colouring.* Masticot, or yellow lead, is the calx or ashes of lead calcined by a moderate heat, according to the degree of which it is changed to a lighter or darker tint; such as peach colour, golden, citron, &c.

MATERIALS. [*materia*, Lat, from *mater* and *rei*, mother of all things.] *In all the arts.* All those things collectively which are used in the construction of any given work of art.

MATHEMATICS. [*μαθηματικος*, from *μανθάνω*, to learn, Gr.] The doctrine of quantity; or a science that considers magnitudes either as computable or measurable. The word, in one of the Greek forms of its derivation, *μαθησις*, signifies *discipline* or *science* in the general, and seems to have been applied to the doctrine of quantity or mensuration, either by way of eminence, or because, this having had the start of all other sciences, the rest took their common name therefrom.

It does not enter into our plan to go into greater length respecting the principles of mathematics; but it was necessary to notice them, inasmuch as every architect should be well acquainted therewith. The science is, it is true, turned to more practical account by the engineer; but let not the architectural student imagine himself exempted from the cultivation of it, or that the use of the pencil will form an effectual substitute. He should remember that no less an authority than Vitruvius has combated this most erroneous notion.

Ripa, in his Iconologia, has represented the science of mathematics under the figure of a woman of middle age, covered with a white and transparent veil, having a globe at her feet, and holding in her right hand a compass. The allegory of Gravelot is more complete. This artist presented a female figure with wings at her head, and an armillary sphere, which announces that this science can measure immensity. The figure appears occupied with the square of the hypothenuse, one of the first mathematical discoveries. The cube sustaining the tablet on which this figure is traced designates the three possible admeasurements—length, breadth, and depth. The different substances and instruments lying about, as well as the figure which, in the distance, seems taking the height of some object all harmonize well, tending to imply the vast utility of the mathematical science.

MATRICES. [*matrix*, Lat. a womb.] *In medallurgy and coining.* Pieces of steel in the shape of dyes, upon which are engraven the several figures, characters, arms, legends, &c. wherewith the species are to be stamped. The engraving is performed with several puncheons, which being formed in rilievo, make, when struck on the metal, an indented impression called by the French *en creux.*

MATTRESS. [*matras*. Fr.] *In archaiology.* The ancients seem to have understood perfectly the use of this convenient article, which was denominated by them *pulvinus*, and was made with feathers extremely soft. They put these mattresses upon the beds or couches brought forth on occasions of public rejoicing, and upon which were often laid the images of the gods. We also find the pulvinus engraved upon several tombs, having on it, in an attitude of repose, the figure of the personage in honour of whom the sepulchre was erected.

MAURITANIA. [from *ἀμαυρὸς*, by aphæ-

resis, *μαυρὸς*, obscure, implying the dark complexion of the inhabitants.] *In gem sculpture.* Upon a medal of Hadrian, we find Mauritania represented under the figure of a moor, leading a horse with a sort of bridle.

MAUSOLEUM. [*μαυσωλεῖον*, from Mausolus, a king of Caria, to whom a sumptuous sepulchre was raised by his wife Artemisia.] *In architecture.* King Mausolus is said to have expired in the year 353 B. C. and his wife was so disconsolate at the event, that she drank up his ashes, and perpetuated his memory by the erection of this magnificent monument, which became so famous as to be esteemed the seventh wonder of the world, and to give a generic name to all superb sepulchres. This edifice was, according to report, built by four different architects. Scopas erected the side which faced the east, Timotheus had the south, Leochares the west, and Bruxis the north. Pithis was also employed in raising a pyramid over this stately monument, and the top was adorned by a chariot drawn by four horses.

The expenses of this edifice were immense, giving occasion to the philosopher Anaxagoras to exclaim, when he saw it, "How much money changed into stones!"

This structure presented something of the shape of a long square: it was surrounded by thirty-six columns, and enriched with an immense number of sculptures. It was, according to Pliny, one hundred and eleven feet in circumference, and a hundred and forty feet high. Praxiteles is thought by Vitruvius to have used his admirable talent among the sculptures.

The Count de Caylus has given, in the twenty sixth volume of the *Mémoires de l'Académie des Belles Lettres*, a paper on this celebrated monument; and in the third volume of the Thesaurus of Sallengre, we find another treatise *De Mausolei Architecturâ*, by Aulisius.

MEASURE. [*μέτρον*, Gr. *mensura*, Lat. *mesure*, Fr.] That which serves as a rule to discover and to ascertain the size, the extent, and the quantity of any given body.

MECHANICS. [*mechanica*, Lat.] See MACHINERY.

MECHANOGRAPHIA. [*μηχανὴ*, a machine, and *γράφω*, to write or engrave.] The term applied to that art which imitates and multiplies the *chef-d'œuvres* of painting by mechanical means. Artists and learned men have at different periods been occupied in the endeavour to discover this secret; and one of the most successful in the search is M. Bœninger, whose performances in this way were for some time exhibited in the Louvre, among other productions of French ingenuity. By a mechanical contrivance equally simple and clever, this gentleman succeeded in copying the works of the great masters on cloth, as well as on wood, porcelain, metals, and even upon glass.

MEDAL, MEDALLION. [*medaille*, Fr. from *μέταλλον*, metal, Gr.] A medal denotes a piece of metal in the shape of a coin, such as was either circulated as current money among the ancients, or struck on any particular occasion, in order to transmit to posterity the portrait of some great person, or the memory of some illustrious action. Scaliger derives the word *medal* from the Arabic *methalin*—a sort of coin with a human head upon it. But the opinion of Vossius is more generally received, who derives it, as we have done, from the Greek *μέταλλον*, of which substance medals are commonly made.

The study of medals is, in a variety of ways, of great and obvious utility. The sole evidence we can have of the veracity of an ancient historian arises from such collateral documents as are evident to all men, and cannot be falsified, and of this species of proof the relics we are treating of form a most important division. The Greek coins, it is true, do not show the dates of events, although they illustrate the chronology of reigns: but this defect does not exist in those of Rome, which commonly mark the date of the prince's consulship, the year of his tribunitian power, and also, on the reverse, the representation or poetical symbol of some great event connected therewith. In geography, likewise, we find the situations of towns, &c. determined by their vicinity to some noted river or mountain. To the painter and sculptor the study of medals is no less important, since it affords them the means of delineating their historical personages with the features they actually bore during life.

None of the classic writers give any account of collections of medals. In the best days of Greece, it was probably not considered desirable to accumulate them, since they must have consisted wholly of those struck by the little neighbouring states, and therefore did not present themselves as matters of curiosity: but as soon as a line of communication was opened between Greece and Rome, the artists belonging to the latter empire imitated the

former in this as well as other branches of art, and there can be no doubt that, at a period somewhat more advanced, collections of medals were formed by the inhabitants of "the eternal city." Dr. Stukely, in fact, in his Medallic History of Carausius informs us, that a complete series of silver coins was lately found in this country, containing all the emperors down to Carausius inclusively. From the decline of the Roman empire, until the revival of learning in the fifteenth century, the study of medals seems to have been suspended in common with every other branch of polite art; but, like the rest, it sprung into notice again at that interesting period.

The first among the moderns who began this pursuit was the celebrated Petrarch, who, being requested by the emperor Charles IV. to write a work containing the lives of eminent men, and to place him in the list, boldly replied, he would do so, whenever the emperor's life and conduct should deserve such a distinction. He subsequently sent the monarch a collection of gold and silver coins bearing representations of eminent men (with suitable inscriptions), and accompanied with an address somewhat like the following: "Behold to what men you have succeeded! Behold whom you should admire and imitate!"

There are few countries, Italy excepted, in which a greater number of coins have been discovered than in Britain, though we are by no means well acquainted with the time when the study of them commenced amongst us. Mr. Pinkerton suspects that Camden was one of the first, if not the very first British author who produced medals in his works, and who must have had a small collection. Speed's Chronicle, published in the seventeenth century, was illustrated with coins from Sir Robert Cotton's cabinet. Gordæus's collection was purchased for Henry Prince of Wales, brother of Charles I., to whom he left it at his death. According to Joseph Scaliger, this fine assortment comprised thirty thousand coins and medals, but they were dissipated and lost among the civil commotions which ensued. A collection of upwards of five thousand was presented by Archbishop Laud to the Bodleian library. The Dukes of Buckingham and Hamilton, Sir Thomas Fanshaw, Sir Thomas Hanmer, Mr. Selden, and many others, are enumerated as having collections. Vaillant speaks of that of Charles II., and we believe our present august sovereign is in possession of a considerable assortment: indeed, several noble cabinets have been recently formed, which we have not space to particularize. That of the late Dr. Hunter, however, claims notice, as having been one of the very greatest in Europe.

Medals are usually formed of gold, silver, and the various modifications of copper. The gold commonly made use of in coinage is about the fineness of twenty-two carats; but as the art of purifying this metal was not much known in former times, the ancient medals are on that account considerably more impure than those of modern date. Many of them are composed of a mixture of gold and silver, called by the ancients *electrum*. The Egyptian silver coins, struck under the Roman emperors, are at first of tolerably pure silver; but afterwards degenerate materially. In fact, the silver, like the gold, was less pure than in succeeding ages, more especially among the Greeks. The brass of the ancients, when pure, which is rather uncommon, consisted of two kinds: the red, or what the ancients called Cyprian brass (called among us copper), and the yellow, or brass. As medals of this nature are generally covered with patina, the difference has not excited attention; though in Roman coins brass was double the value of copper, and it has been conjectured that the Greeks followed the same rule.

On the face of medals we generally find the portrait of some powerful or illustrious personage, and most commonly in profile. The coins of the kings of Macedon are the most ancient of any yet discovered bearing portraits; and Alexander I. who commenced his reign about 500 years B. C. is the earliest monarch whose medals have yet been discovered. Then succeed the sovereigns who reigned in Sicily, Caria, Cyprus, Heraclea, and Pontus. Afterwards comes the series of kings of Egypt, Syria, the Cimmerian Bosphorus, Thrace, Parthia, Armenia, Damascus, Cappadocia, Paphlagonia, Pergamos, Galatia, Cicilia, Sparta, Pæonia, Epirus, Illyricum, Gaul, and the Alps. This series reaches from the era of Alexander the Great to the Christian era, comprising a period of about 330 years. This must be accounted the third medallic series of ancient monarchs, and the fourth and last descends to the fourth century, including some of the kings of Thrace, of Bosphorus, and Parthia, with those of Comagene, Edessa, or Osrhoene, Mauritania, and Judea. A perfect and distinct series is formed by the Roman emperors from Julius Cæsar to the Gothic destruction of the empire, and indeed still

later, but it is to be lamented that towards the latter part of this series, the coins become exceedingly barbarous. Many series may be formed of modern potentates.

The kings, upon Greek coins, have generally the diadem without any other ornament. The side-face is always presented; but upon some very early Greek coins of cities, and Roman consular coins, full faces are found, of amazing relief and expression. Occasionally, several heads are found on the same coin, either impressed upon both sides, or only upon one. Thus the beautiful gold medal of Ptolemy Philadelphus, king of Egypt, bears his own head and that of Arsinoe, his queen, on one side, and those of his father and mother on the reverse. Coins have also been discovered of Antony and Cleopatra, Agrippina and Germanicus, &c.

The reverses of medals contain figures of deities at full length, with their attributes and symbols; public buildings and diversions; allegorical representations; private and historical events; public ceremonies of various kinds; plants, animals, &c. Some reverses bear the portrait of the queen, the son, or daughter of the prince who appears on the obverse. On the Roman coins, the reverses did not differ much till about 100 years B. C. when their consular medals afford an infinite variety.

The figures of deities and personifications, on the Roman medals, are commonly attended with their names, in addition to the allegorical symbol; but the Greek medallists, with superior taste and delicacy, left these (at that day sufficiently obvious) to explain themselves.

The most ancient coins, according to Frœlich, are distinguished by the following marks, accounted by him infallible. 1. Their oval circumference, and globular swelling shape. 2. Antiquity of alphabet. 3. The characters being retrograde. 4. The indented square. 5. The simple structure of the mintage. 6. Some of the very old coins are hollowed on the reverse, with the image impressed on the front. 7. The dress, symbols, &c. frequently of the rudest design and execution.

The Grecian medals claim that place in a cabinet from their antiquity which their workmanship might ensure to them, independently of that adventitious consideration. The invention of coinage is ascribed by Herodotus to the people of Lydia, upwards of 1000 years before the Christian era. In a short time the Greeks assumed great elegance; and it is observed by Pinkerton, that an immense number of the medals of cities, which, from their character, we must judge to be of the highest antiquity, have a surprising strength, beauty, and relief in their impressions. About the time of Alexander the Great, however, this art appears to have attained its very highest perfection. The head of Minerva on his gold affords a variety of exquisite faces; and the coins of Alexander and his father exceed all that were ever executed, if we except those of Sicily, Græcia Magna, and the ancient ones of Asia Minor. Sicilian medals are famous for workmanship even from Gelo's time. The coins of the Syrian kings, successors to Alexander, almost equal his own in beauty. But adequate judges are constrained to confine their high praises of the Greek mint to those coins struck before the subjection of Greece to the Roman empire. The feeling of slavery appears to have deadened their genius, and rendered them comparatively dull; and accordingly, the Greek imperial medals must certainly be regarded as inferior to the Roman.

The Roman coins, considered as medals in a cabinet, may be resolved into two great divisions, the *consular* and *imperial*. The consular coins seldom or never bore the names or titles of consuls till towards the close; nevertheless they are not improperly called consular, because they were struck in the consular times of Rome. These have also been denominated coins of families; and are always so arranged, according to the names inscribed on them. The brass consular coins are rather uninteresting, consisting chiefly of large unwieldy pieces, with types of insipid similarity. Few of them have any imagery or symbol.

Gold was first coined at Rome 62 years after the application of the mint to silver. The general gold coin is the *aureus*. The consular coins, whose number is estimated at two hundred in brass, and two thousand in silver, extend not to above one hundred in gold, most of which are curious. The beautiful Pompey, with his sons on the reverse, and the Brutus with his brother Lucius, commonly classed with imperial coins, should rank with the consular. Most of the gold consular coins are of great beauty and high value. We have in a former part of this work spoken of Imperial Medals, and the reader is referred to that article.

The *colonial* medals had sometimes Greek, sometimes even Punic legends: but those with Latin only are far more

numerous. Some of these coins are elegant: but they are, for the most part, rude and uninteresting. They begin with Julius and Antony, and occur only in brass.

All coins preceding the ninth century, or age of Charlemagne, are denominated *ancient;* all posterior to that period down to the present time, *modern.* Mr. Pinkerton, in his valuable *Essay on Medals,* observes of the latter that, down to the revival of learning in the sixteenth century, "they are so very rude that curiosity alone suggests any inducement to examine them. Without dates or epochs, they cannot serve one purpose of utility. The very portraits found on them are so uncouth, that the 'human face divine' is scarcely discernible; the reverses always bear a most beautiful cross, garnished with pellets, or a dish of some such exquisite flavour." Mr. Pinkerton concludes his notice of modern medals with a comparison between them and the ancient ones. The most observable difference in respect of art seems to lie in the portraits. The ancient artists, even of the lowest class, marked the character, and exhibited the life and spirit, of the person represented; while the moderns only produce a kind of model, with very faint features of the character. The ornaments of the portraits have also this effect; the ancient being simple and picturesque in real life, whereas ours are discordant and ungraceful. The reverses of ancient medals, when consisting of human figures or detached objects, exceed the modern in every view of strength, elegance, or taste. But in landscape, and all belonging to perspective, the modern excel the ancient to a prodigious degree. A great fault of modern reverses, as of modern portraits, is that the manners of the time and country are often wholly perverted in them. Personifications are of all ages, countries, and languages; but what title have heathen gods and goddesses to exist on our medals and attract the adoration of our connoisseurs?

The first English medal is that in the Duke of Devonshire's collection. It is of a large size, and executed after the plan of the early Italian medals. It has on the reverse the arms of Kendal, with the inscription Tempore Obsidionis Turcorum, MCCCLXXX. On the other side is a portrait with 10. Kendal Rhodi Turcopellerius. It was found last century in Knaresborough Forest, but was most probably done in Italy. The next is that of Henry VIII. of gold, struck in 1545: it is larger than a crown piece, with the king's head upon the obverse, and three legends within each other including his titles, &c. while upon the reverse are two inscriptions (one in Hebrew, the other in Greek), declaring him to be head of the church. This was imitated exactly by Edward VI. whose coronation medal is the first we have. There are two medals of Philip and Mary, whose execution is tolerably good; but those of Elizabeth are very poor. There are good medals of James I. and his queen, with a fine one of Charles I. and Henrietta, though the workmanship is much inferior to the antique. There are many good medals of Charles, with various devices upon their reverses. Under the commonwealth the celebrated Simon produced medals which are deservedly reckoned the most admirable pieces of modern workmanship. There are many good medals of Charles II., James II., and William III., and a few of James after his abdication. Some fine gold, silver, and copper medals were issued in the time of Queen Anne; the two last affording a series of all the great actions of the Duke of Marlborough. About 1740, a series of medals was engraved in London by Dassier, a native of Geneva, containing all the kings of England, being thirty-six in number. They are executed upon fine copper, in high taste. There are besides numerous medals of eminent private persons in England; and those who are desirous of further information concerning them are referred to Pinkerton's Essay, already cited, and Mr. Snelling's plates of them.

Preservation or Conservation of Medals. The reason why some medals are so much more prized than others arises from the greater or less degree of preservation they are in. Mr. Pinkerton says, that a true judge will reject even the rarest coins if in the least defaced either in figures or legends. This spirit of exclusiveness does not, it is true, obtain among all collectors of medals: but it is absolutely indispensable that a coin be in what is called good *preservation;* which in those of the Greek or Roman emperors, and the colonial coins, is held to be when the legends can be read with some difficulty; but when the conservation is perfect, and the medal just as it came from the mint, even the commonest coins are valuable.

The fine rust, resembling varnish, which covers the surface of brass and copper coins is found to be the best preserver of them, and is produced by lying in a certain kind of soil. Gold cannot be contaminated but by ironmould, which happens when the coin lies in a soil impregnated

with iron; but silver is susceptible of various kinds of rust, principally green and red: both, however, yield to vinegar. In gold and silver coins, the rust must be removed, as prejudicial: but in brass and copper it is preservative and ornamental, a circumstance noticed by the ancients.

The value of the medal is lowered when any of the letters of the legend are misplaced, as a suspicion of forgery is thereby induced. A similar or even greater diminution in value occurs with respect to such coins as have not been well fixed in the dye, which has occasioned their slipping under the strokes of the hammer, and thus making a double or triple image. Many specimens have been found, on which the one side is perfectly well formed, but the other blundered in the manner just mentioned. It is considered, as a certain rule in numismatics, according to Pinkerton, that none of the ancient money was cast in moulds, except the most ancient and very large Roman brass, commonly called weights, and some other Italian pieces of that description.

Medallions are medals of a larger size, and supposed to have been struck by the different emperors for their friends, or for foreign princes and ambassadors. That the smallness of the number of these, however, might not put to hazard the loss of the devices they bore, the Romans generally took care to stamp the subjects of them upon their ordinary coins. Medallions, in respect of other coins, resembled what modern medals, properly so speaking, are in respect to money, having had no current value, but merely an arbitrary one. Medallions are so scarce that no set can be made of them even with mixing the different metals.

The most valuable writer on this subject is, without doubt, Mr. Pinkerton, the second edition of whose *Essay on Medals* will, indeed, almost preclude the necessity of reference to any other work. This edition is enriched and illustrated with numerous engravings, forming specimens corresponding exactly in size and shape with the originals, of all the principal varieties of medals. It is in two small volumes, and was published in London in 1729. Amongst other authors in this department may be enumerated Enea Vico, who published in 1548 or 1555, *Discourses on the Medals of the Ancients;* Charles Patin, whose *History of Medals*, or Introduction to that Science, appeared in 1665; Antoine le Pois, in 1579, gave his *Discours sur les Cachets et Medailles des Anciens:* in 1692, Pere Jobert, or Joubat, presented to the public his *Science des Medailles*, the best edition of which is that of 1739, by M. le Baron Bimard de la Bastie. On the same year on which Jobert published the above work, another much resembling it came out in this country, entitled, *The Greek and Roman History, illustrated by Coins and Medals representing their Religion, Rites*, &c. by Obadiah Walker; and in 1695, a translation of Jobert's work appeared under the title of *The Knowledge of Medals*, also ascribed to Walker; the celebrated John Evelyn's *Numismata*, or *Discourse of Medals, ancient and modern*, folio, issued from the press in 1697; in 1720, an Italian musician, of the name of Haym, put forth at London his *Tesoro Britannico*, or *British Treasury*, in both languages.

Mr. Pinkerton strongly advises the student to peruse the work of Frœlich, entitled *Notitia Numismatum antiquorum illorum, quæ Urbium Librarum, Regum et Principum, ac Personarium illustrium, appellantur*, Vienna, 1758, 4to. The following authors are also very favourably mentioned by him. For the study of the Greek coins, Goltzius's *Historia Siciliæ et Magnæ Græciæ ex antiquis Numismatibus*, Antwerp, 1644, fol.; Gessner's *Thesaurum Numismatum*, Tiguri, 1738, 2 vols. fol.; the various works of Pellerin, published at Paris, between 1762 and 1778, forming altogether 10 vols. 4to. Dr. Combe *On Dr. Hunter's Coins of Greek Cities*, London, 1782, 4to. This is perhaps the most excellent of all the numerous works on the subject. Gessner has also given much information regarding Roman medals, both consular and imperial, with whom, for the rarer coins, should be read Vaillant's *Numismata Imperatorum Romanorum*, 3 vols. 4to, Roma, 1743, as well as his *Numni Antiqui Familiarum Romanorum*, 2 vols. fol. Amsterdam, 1703; Banduri's *Numismata Imp. Rom. a Trajano Decio usque ad Palæologos* (or to the termination of the Byzantine empire), 2 vols. folio, Lutetiæ, 1718; Occo's *Numismata Imp. Rom.*

Modern coins and medals have also been treated of by various hands. We shall confine ourselves to specifying a few who have written on English coins. Among these works are:—Lowndes's *Report, containing an Essay for the Amendment of Silver Coins*, 8vo. London, 1695; Snelling's *Views of English Money*, 1763; Ducarel's *Letters on Anglo-Gallic Coins;* and Clarke's *Connexion of the Roman, Saxon, and English Coins*, 4to. London, 1767.

Medallion. *In architecture.* Any circular tablet on which are presented imbossed figures or bustos.

MEDALLURGY. [from *medal.*] *In archaiology.* The art of striking medals and other coins.

MEDICINE. [*medicina*, Lat. from μηδος, a cure.] *In mythology, painting, and sculpture.* The ancients represented Medicine allegorically under the traits of Apollo, Minerva, Hygeia, and Esculapius. The moderns, on the contrary, delineate the same quality in the shape of an aged female, in order to express thereby that experience in the basis of the medical art. She holds a figure of Nature, the perpetual object of her observation, and the knotted stick upon which she leans indicates the difficulties by which the study is accompanied. The serpent, the casting of whose skin is emblematical of health, clings round her staff which rests upon the works of Galen and Hippocrates: while the cock, consecrated of old to Esculapius, on account of its vigilance (so necessary in the healing art), is at hand; and the bit and bridle lie at the feet of the old woman, to indicate the temperance indispensable to the convalescent. After all we question whether the practisers of this noble art would fancy themselves much complimented by the personification.

MEDITATION. [*meditatio*, Lat.] *In the mythology of painting and sculpture.* The ancients have not personified this quality except under the same traits as Mnemosyne. The moderns depict it in the figure of a seated female, her temples resting on her hand, and her whole form expressive of the profoundest reverie: her eyes are shut, and a large veil enwraps the entire figure.

MEDITERRANEAN. [from *mediterraneum mare*, Lat. an inland sea.] *In emblematical painting and sculpture.* This sea is particularly delineated among the moderns by a female who holds an oar in her hand, and has a dolphin by her side.

MEDUSA. [Lat. μέδουσα, Gr.] *In the mythology of art.* One of the three Gorgons, daughters of Phorcys and Ceto. She was celebrated for her personal charms and the especial beauty of her locks. This tempting Neptune, he obtained her favours in the temple of Minerva, which so enraged that deity that she changed these alluring locks into serpents. Perseus rendered his name immortal by the conquest of Medusa. He cut off her head, and the blood which trickled from the wound all turned into snakes.

The head of the dying Medusa is sometimes represented as most beautiful, sometimes most appalling. In the Strozzi Medusa at Rome, her look is dead, but has a beauty death itself cannot extinguish. She is depicted, on a jasper at Florence, with two serpents, whose tails are twined together under her chin, and their heads reared over her forehead. Her eyes are frightfully convulsed. A breastplate with the Medusa's head, when worn by a deity, was called Ægis.

MEGALOGRAPHIA. [Gr. from μέγας, great, and γράφω, to write or engrave.] *In archaiology.* Vitruvius applies this term to a kind of painting with which the ancients were accustomed to adorn the interior of their edifices. It admitted only of representations of their gods and demigods and their fabulous exploits.

MELANCHOLY. [*melancholia*, Lat. from μέλαινα and κολη, *atra bilis*, or black choler.] *In allegorical painting and sculpture.* The emblematical figure of Melancholy is a man of leaden coloured complexion, holding in one hand an open book, in the other a closed purse; to represent his tendency to study and his misanthropy. La Feti, in a picture which was in the Napoleon Museum at Paris, and of which many copies have been made, has personified the same dark quality under the figure of a female, young, but sallow and wasted. Books are scattered around her, and on a table near, lie in a confused way several globes and mathematical instruments. Albert Durer, in a print which is among the very rarest of his works, has symbolised Melancholy under the semblance of a seated female, her head resting on her hand. Her air is severe, her brow wrinkled, her eyes bent to the ground. Around lie in disorder instruments of art, books, rules, compasses, &c. A bunch of keys hangs at her side. Just by stands a ladder, the top of which is hidden in the clouds, at her feet is a drowsy dog, and the window of the apartment is covered with cobwebed cloth.

MELINA. [μήλινον, Gr.] *In the archaiology of art.* A kind of earth or colour used by the ancients in painting, and which, according to the description of Dioscorides somewhat resembled ochre.

MEMBER. [*membrum*, Lat. *membre*, Fr.] *In all the arts.* A limb: a part appendant to the body. We say of a figure, in the arts of design, that its different members are exact and well proportioned.

In architecture, this word is applied to each of the different parts of a building, to each separate portion of an entablature, or to each different moulding of a cornice.

MEMNON. [μέμνων, Gr. cherishing, lasting.] *In ancient architecture and sculpture.* A king of Abydos, son of Tithonus and

Aurora. Achilles slew him before Troy, because he had brought assistance to Priam; and when his body was laid upon the pile, Apollo changed him into a bird, at the request of Aurora: this bird multiplied greatly, and retired into Ethiopia with its young ones. They were called Memnonides; and it has been observed by several of the ancients that they never failed to return yearly to the tomb of Memnon in Troas, where they fought till some of them were killed. The Æthiopians, or Ægyptians, over whom Memnon reigned, erected a celebrated statue in honour of their monarch. This statue had the wonderful property of uttering a melodious sound every morning at sunrise, like that which is heard at the breaking of the string of a harp when it is wound up. This music was said to be produced by the rays of the sun when they fell upon the statue. At the setting of the sun, and in the night, the sound was lugubrious. Strabo, in speaking of this curious subject, confesses himself to have been puzzled, and to have remained ignorant whether the noise actually proceeded from the base of the statue or from the people who surrounded it while he was present. According to the testimony of Anticlides, an author alluded to by Pliny, Memnon was the inventor of the alphabet.

M. Millin goes at some length into an account of the controversy between two celebrated travellers, Mr. Pocock, and M. Norden, a Dane, as to the situation and existing fragments of this famous monument. Those authors both treat of certain colossal statues, more or less in a state of mutilation, which are to be seen in the neighbourhood of Carnac, and on the western stream of the Nile. Two of these are still on their bases or pedestals, to one of which Mr. Pocock seems anxious to secure the honour of being esteemed the ancient musical phenomenon. M. Norden, on the other hand, maintains that distinction to be due to one of two other statues which have fallen, and are grievously disfigured either by time or violence, or both. Millin takes part with the Dane, and is even malicious enough to conjecture the reason why those who visit the spot incline to adopt the theory of Pocock, to be because *his* Memnon is formed of a stone or granite of softer quality, thereby allowing these virtuosi to immortalize themselves by the inscription of their names. The fact is beyond the possibility of demonstration, nor is it of any consequence that it should be otherwise. To the lover of poetry the statue still exists and flourishes, the mysterious music still vibrates to the touch of the rays of the morning sun. Let us leave the splendid fiction (if such it be) as we find it, and not, by seeking to establish what is incapable of proof, sap the foundation of a pleasant and classical superstition.

Memnonium. [Gr.] *In archaiology.* Strabo and other ancient writers give this name to the structure which is said to have encircled the celebrated statue of Memnon. This long and superb peristyle was dismantled and destroyed by order of Cambyses, when he conquered Egypt. The modern Greeks call it Σεραπωμ, doubtless because they trace some resemblance between the colossal statue of Memnon and that of Serapis. At Abydos were found the ruins of the palace of Memnon, to which the Greeks applied the appellation of Μεμνονιυμ.

Memory. [*memoria*, Lat.] *In emblematical painting and sculpture.* The Greeks personified Memory under the figure of Mnemosyne. She is sometimes represented as a young female driving in a nail. The iconologists also represented her as a middle-aged woman whose head-dress is adorned with pearls and jewels, and who holds the tip of her ear with the two first fingers of her right hand. Ripa gives her two visages, a black robe, a pen in her right hand and a book in her left. The dog is often placed by personifications of memory, in allusion to the acuteness with which this sense is displayed by that sagacious animal.

Menace. [Fr.] *In emblematical painting and sculpture.* The iconologists represent this passion under the traits of a female with flaming eyes, whose action is pregnant with violence and reproach, and who holds a sword in one hand and a staff in the other. They generally lay the scene in the dead of night, which however is faintly illuminated.

Menage. [*manège*, Fr.] *In architecture.* The name of a place generally of circular construction, appropriated to the purposes of horsemanship and teaching the art of riding. It was very customary for the Romans to have buildings of this kind in the immediate vicinity of their houses. Pliny has left us the following picturesque description of his: "The menage of my country house is open in the middle, and unfolds itself at once in all its extent to the view of those who enter. It is encompassed by plane-trees, round which ivy is entwined. Thus while the top of these trees is verdant with their own proper foliage, the lower part is equally clothed

with a verdure foreign to it. These ivies run along the trunk and branches, and spreading from one plane tree to another bind them together. Between the planes are box-trees, and these in turn are environed by laurels, all mixing and mingling their various foliage.

"Towards its entrance the menage is straight, but at its extremity it deviates into a semicircle. The walks within side as well as without receive a moderate and agreeable degree both of heat and light. Roses present themselves on all hands, and cypress trees form arches overhead. Rides and alleys diverge in every direction, some circular, others straight; while box trees are trained into various shapes and devices, occasionally presenting the name of the owner, in other instances that of the constructer or architect. Between the trees small pyramids, and other ornamental objects arrest the eye."

MENAGERY. [Fr.] *In architecture.* A structure divided into separate compartments, where are kept and reared animals of foreign or of rare species. The opulent Romans, who were passionately fond of the chase, had frequently menageries, or perhaps we might rather term them preserves, attached to their villas.

MENISCUS. [Lat. *ménisque*, Fr.] *In the archaiology of sculpture.* The Athenians were in the habit of placing upon the heads of their statues a kind of disk or bronze plate, to defend them from the rain, and more particularly from the ordure of birds. The word is derived from the resemblance of this article to a lunar disk.

MERCURY. [*Mercurius*, Lat. from *merx*, merchandise, or *mercator*, a merchant.] *In mythological painting and sculpture.* The son of Jupiter and Maia. He was the god of merchandise, and in this character is represented with the attribute of a purse in his hand, and with his winged cap on his head, which in the language of the statuaries is as much as to say, "If you take not gain when offered, it will fly away, and perhaps for ever." In a gem, Mercury is giving up his purse to Fortune: in a painting in Mear's collection, he offers it to Minerva, who takes only a little out of it, as if good luck had more to do with it than good sense: in another gem he offers it to a veiled lady, like Pudicitia, who strenuously refuses it.

Mercury was also esteemed the god of eloquence, as likewise of all gainful arts; the inventor of the harp, and of the exercise of wrestling. Another of his functions was, to patronize thieves, himself being an adept in that worthy profession: notwithstanding which he was also, strangely enough, regarded as the presider over highways and the guide of passengers, in which capacity, terminal statues (See HERMES) were erected to his honour in the public roads.

But the principal and distinguishing character of this god, called among the Greeks Ἑρμῆς, is that of Jupiter's messenger. His make is young, airy, and light, all proper for swiftness. His limbs are finely turned, and he yields to none but Apollo and Bacchus in beauty. His distinguishing attributes are the petasus, or winged cap; the talaria, or wings for his feet; and the caduceus, or wand, with two serpents about it. To these must be added, his harpè or long sword, with a particular hook behind it.

The cap is like the common cap of the servants of old. The wings might be taken off; and we sometimes find only two feathers stuck in it. Hence, perhaps, the practice of the Roman messengers sticking a feather in their cap, or, sometimes, in the letter itself, as a mark of dispatch (Juv. Sat. iv. v. 149). The wings for the feet might also occasionally be removed. In a figure in the Justinian gallery, Cupid is fixing the wings on Mercury's feet. The caduceus, too, is sometimes represented with wings. Mercury is thus accoutred in the Vatican manuscript with the chlamys floating behind him in the air. By the flying back of the drapery, the artists generally denote the motion of a person making rapid way.

MERCY. [*merci, miséricorde*, Fr.] *In emblematical painting and sculpture.* Ripa, seldom very happy in his allegories, has left us a particularly far-fetched personification of Mercy, which he represents under the figure of a woman, whose complexion is of a dazzling whiteness, and who has an aquiline nose, which Ripa seems to regard (though nobody else does) as an indication of sensibility. She has an olive garland round her head, her left shoulder bare, a branch of cedar in the right hand, and at her feet a rook, which bird the Ægyptians are said to have reverenced as more peculiarly inclined to clemency than any other.—It is almost needless to say that a painter who should in the present day allegorize Mercy after this fashion would be set down either as unintelligible or mad. The only comprehensible method of depicting this quality is obviously by embodying it in the shape of some one who is in the act of relieving the unfortunate.

MESAULON. [Gr.] *In ancient architecture.*

According to Vitruvius, the Greeks and Romans applied this name to a little court or open space between the two sides of a large house, similar to those which we now observe in many palaces, and the object of which in either case may be described to give light to staircases, separate entrances, &c.

METALS. [μέταλλον, Gr.] Firm, heavy, and hard substances, of which it is observed, that they possess a lustre; that they are opaque; that they are fusible, or may be melted; that their specific gravity is greater than that of any other bodies yet discovered; that they are better conductors of electricity than any other body; that they are malleable, or capable of being extended and flattened by the hammer; and that they are ductile or tenacious, that is, capable of being drawn out into threads or wires. The simple metals are six in number; gold, silver, copper, tin, iron, and lead: but recent discoveries and classifications have greatly increased this number.

Homer never speaks of metals collectively, and probably the word μέταλλον, from whence our term is derived, was not then at all in existence. The original discovery of metals was doubtless accidental, but the art of metallurgy as evidently springs from industry and invention. Various savage nations are at the present day utterly ignorant of the use of metals, and substitute fish-bones, shells, flints, &c. Egypt and several Asiatic countries were, as appears by holy writ, early acquainted with the art of working metals; indeed with them obviously originated almost all the arts whether useful or ornamental, and to Egypt Greece herself is indebted for the first elements of most of them.

M. Millin adopts a theory that the well known phrase of "the four ages of the world," designated by the terms golden, silver, copper or brazen, and iron, was first meant to point out the successive order of the discovery of these metals.

The metals employed in the Fine Arts are gold, silver, copper (and its alloys, such as bronze, &c.) tin and lead. Several others however enter, in a state of oxyde, into use in oil paintings and enamelling.

Upon various ancient coins and medals we find the name of the country inscribed from which the metal composing them was extracted; as, for instance, those inscribed METALL. DELM. designate that the metal was brought from Dalmatia, which was anciently denominated Delmatia, and of the number and richness of the mines wherein both the historians and the poets often vaunt.

METAMORPHOSIS. [μετὰ, to turn about, and μορφη, a form.] *In the mythology of art.* Transformation: change of shape. This, as applied to mythology is of two kinds: namely, first, the ephemeral assumption of other forms by the heathen deities, to accomplish any given purpose—such, for instance, as the transformation of Jupiter into a bull, or that of Minerva into an old woman: and, second, the perpetual metamorphoses of mortals by the gods: as, for example, the change of Actæon into a stag, of Lycaon into a wolf, &c.

Metamorphoses are not expressed with facility either by the brush or chisel; and few ancient monuments of this description have reached our times. Among the most eminent are the Tyrrhenian sailors turned into dolphins, found upon the frieze of the choragic monument of Lysicrates at Athens; a beautiful nymph transformed into a flower, in the cabinet of Mr. Townley; a gem engraven for the Duke of Orleans, representing the metamorphosis of Narcissus into a flower; Actæon changed into a stag upon a Greek vase.

The moderns however have achieved many performances of this nature, among which may be noticed that of the chevalier Bernini, which represents Apollo seizing Daphne at the moment at which she is changing into a laurel.

METATOME. [*metatus*, Lat. meted, or measured out.] *In architecture.* The space between one dentil or denticle and another. Vitruvius applies to the same thing the word metocha.

METOPE. [μέτα, between, and ὀπη, a hole.] *In architecture.* The interval or square space between the triglyphs in the Doric frieze.

The ancients were in the habit of ornamenting these parts of their buildings with carved works, or with paintings representing the heads of oxen, vessels, and other articles brought into use in heathen sacrifices.

Since some difficulty is found to occur, in disposing the triglyphs and metopes in that degree of symmetrical proportion required by the Doric order, certain architects have advised the use of that order to be restricted to the construction of temples.

METRICAL. [*metricus*, Lat. from μέτρον, Gr. a measure.] *In the arts of construction and design.* In its most extensive signification this term implies every thing which is measured with exactness and due proportion; and of which both the greater and lesser parts harmonize well with each other. A structure built for the purposes

of habitation, and which consequently should be planned with a peculiar reference to objects of utility, has of course less necessity to lay out for attracting the eye by its beauty and shapeliness than another purely ornamental; nevertheless, this principle of consistency and harmony should never be wholly lost sight of.

Mexico. *In the history of the arts.* At the epoch of the discovery of America by the Spaniards, this people had already reached a certain degree of civilization, and had practised several arts, including that of drawing. On the landing of Cortez, the inhabitants of various parts of the country apprized their monarch of what was going forward by making a kind of paintings on cloth. Some relics of this sort are extremely curious. They represent marches of the different armies, sacrifices made to their gods of straggling Spaniards by the enraged barbarians; triumphal entries of the combatants into various towns, &c. &c.

The Mexican paintings however, which some have extravagantly praised, are depreciated by other writers, as uncouth delineations of common objects, or very coarse images of the human and other forms, destitute of gracefulness and indeed of propriety. In the armoury of the royal palace of Madrid are exhibited several suits of armour said to have belonged to Montezuma; and which are composed of thinly lacquered copper-plates. Dr. Robertson observes of these, that in the opinion of competent judges they are evidently Eastern. Clavigero, on the other hand, maintains them to be actually Mexican; since, says he, we are absolutely certain, from abundant testimony, that those nations used such plates of copper in war, and that they covered their breasts, thighs, and arms therewith as a protection against arrows: whereas we do not know that such were ever in use amongst the inhabitants of the Philippine Islands, to which Dr. Robertson refers them, or among any other people who had any commerce with the Mexicans.

These people, proceeds Clavigero, could boast of many inventions worthy of immortalizing their name. Besides those of casting metals, and mosaic works in feathers and shells, they understood the art of making paper: together with those of dyeing in indelible colours; of spinning and weaving the finest hair of rabbits and hares; making of a stone called itztli, beautiful lookingglasses set with gold; the cutting and polishing of gems; breeding of the cochineal, and making use of its colour; preparing of cement for the pavements of their houses, &c. Their potters were famous; and their carpenters wrought several kinds of wood with instruments made of copper.

It must, however, be admitted, that in the copper-plates and wood-cuts which have been published as representations of Mexican paintings, every figure introduced, whether of men, quadrupeds, or birds, is extremely rude and ungainly. But although necessarily ranking low as works of art, they rise into immense interest and importance, when, as we before observed, they are considered as national records.

Of their picture-writing some singular specimens have been preserved; the most valuable of which have been published by Purchas in sixty-six plates, divided into three parts. The first contains the history of the Mexican empire under its ten monarchs. The second is a tribute-roll, representing what each conquered town paid into the Royal Treasury. The third is a code of their institutions, domestic, political, and military. Another specimen of Mexican painting has been published in thirty-two plates by the Archbishop of Toledo; and some very curious examples have been recently brought over to this capital by Mr. Bullock of the Egyptian Hall, Piccadilly, whose exhibition of ancient and modern Mexico (the result of a spirited voyage to that country for the purpose of collecting materials) is interesting in a variety of ways, and highly deserving of a visit from every lover both of Nature and Art.

All these paintings resemble each other strongly in style and character. They represent *things* rather than *ideas;* exhibit images to the eye, without arrangement or selection; still they are worthy of consideration as exhibiting an instance, by no means common, of the efforts of a barbarian nation towards a very high degree of refinement; and they acquire peculiar interest just now, when the modern Mexicans have assumed a new attitude, and one to be respected amongst the nations of the world.

Mezzo-Tinto. [Italian, half-tinted.] *In engraving.* A particular method of engraving figures on copper.

We have already (see Engraving) made some allusion to the probable invention of this branch of art. It is very peculiar in its nature and execution. The artist rakes, hatches, or punches the surface of the plate all over with a knife, or instrument made for the purpose, first one way and then the other, across, &c. till the face of

the plate be thus wholly covered with lines or furrows, close and as it were contiguous to each other; so that if an impression were thus taken from it, it would be one uniform blot or smut.

This being done, the design is drawn or marked on the same face; after which they proceed, with burnishers, scrapers, &c. to expunge or take out the dents or furrows in all those parts where the lights of the piece are to fall; and that more or less as the lights are to be stronger or fainter: leaving black those parts which are to represent the shadows or decipherings of the draught.

It being much easier to scrape or burnish away parts of a dark ground, corresponding with the outline of any design sketched upon it, than to form shades upon a light ground, by an infinite number of hatches, strokes, and points, which must all terminate with exactness on the outline, and at the same time differ in their force and manner; the method of scraping, as it is called in mezzo-tinto, consequently becomes much more easy and expeditious than any other manner of engraving. The instruments used in this style are cradles, scrapers, and burnishers.

The art of mezzo-tinto engraving was at first considered as only adapted to broad subjects, and where high minute finishing was required, it was thought vain to attempt it; but the great advance made since the introduction of the art have convinced every artist and amateur to the contrary, and the successful works of Eadom (especially his masterly flower-pieces) are admirable specimens of its power, as also are the beautiful productions of Hodges, Dixon, and many other artists of the present day. It is decidedly most appropriate for the engraving of portraits, both as to touch and effect.

The art of scraping mezzo-tinto has been applied to the printing with a variety of colours, in order to produce the resemblance of paintings.

Micocoulier. [Fr.] *In the art of carving in wood.* The Milanese editors of Winckelmann's History of Art range this tree among those the wood of which was worked by the ancient artists: but it remains to determine by what name the ancients knew and denominated it; whether it is the *celtis* of Pliny, as Dalechamp thinks, with considerable probability, or the *alisier*, as Hardouin is of opinion. At all events, there is no reason to imagine that it was ever made use of by the sculptors.

Mill-house. [μυλη, Gr. mýln, Sax.] *In architecture.* A building raised for the purpose of enclosing an engine or machine, which, by means of any adequate force, as steam, water, wind, or manual exertion, acquires such an additional power as enables the machinery to act with increased effect and with requisite regularity.

Water-mills similarly constructed to ours appear to have become known to the Romans about the time of Cicero.

Milliarium Aureum. *In archaiology.* A gilded pillar in Rome, near Saturn's temple, whence the account of their miles are said to have begun. See the following article.

Milliary. [*milliare*, a milestone, Lat. from μίλιον, Gr.] *In archaiology.* The stone or column erected by the Romans in their public roads to mark the distances from one mile to another, and the number of miles from Rome was also marked thereon. Hence the expression so often met with in Latin authors, *tertio ab urbe lapide, ad quartum lapidem*, &c.

Caius Gracchus was the first Roman who established this highly useful custom, which in the time of the emperors was adopted on all the public roads throughout the empire. Caius Gracchus likewise occasioned square flat stones to be placed at occasional distances, to assist the traveller in getting into his chariot, mounting his horse, &c.

In the capitol at Rome is still preserved a milliary or milestone found near the Appian way, and which has been conjectured, from its appearance and situation, to have been the first or original one. In the forum of ancient Rome there was a grand milliary stone, upon which was traced the great roads of Italy, and the distances of the principal places from the capital. It was Augustus Cæsar who, while he exercised the office of *curator viarum*, erected this pillar and enriched it in a variety of ways. It received the name of *milliarium aureum* (golden milliary) from these ornaments, and above all from a globe of gilt metal, by which it was surmounted. This stone or column has been regarded by some antiquaries as having been the central point from which all the rest were reckoned; but a variety of opinion has always prevailed on this subject.

The common milestone to be found on all the highways (or at least all the considerable ones) in this country is a usage derived from that of the milliary.

Minaret. [Fr. from the Turkish.] A kind of circular turret rising by different stages or divisions, each of which has a balcony. These turrets or minarets are common enough in Mahometan countries.

They are used as posts from whence the hours are announced and the people are called to prayer, bells not being in use among those nations.

MINERVA. [Lat.] *In the mythology of painting and sculpture.* The goddess of wisdom, war, and of all the liberal arts, is fabled to have sprung from Jupiter's brain ready armed and in full growth. She was immediately admitted into the assembly of gods, and considerable power was awarded to her. She could prolong the life of men, bestow the gift of prophecy, and indeed was the only one of all the divinities whose authority and consequence were regarded as equal to those of her father. The actions of Minerva are numerous, as well as the kindnesses by which she endeared herself to man. She and Neptune disputed as to which should give a name to the city of Cecropia. It was decided that whichever of the two produced in an instant the most beneficial gift to mankind should have that honour. Neptune, with a stroke of his trident, brought a horse out of the ground; whilst Minerva, with her lance, made an olive spring up in full bloom: this being the symbol of peace, was held a preferable achievement by the gods, and thereupon the victorious goddess called the city Athens, and became its tutelar deity, the Greeks always denominating Minerva Ἀθήνη or Ἀθηναία.

The worship of Minerva was universally established: she had magnificent temples in Egypt, Phœnicia, all parts of Greece, Italy, Gaul, and Sicily. She was invoked by every artist, and particularly such as worked in painting, sculpture, embroidery, or wool.

Minerva is represented as a beauty, but of the severer kind, and without the graces and softnesses, which for instance distinguish Venus. Dignity and a becoming air, firmness and composure, with regular features and a certain masculine sternness, form the peculiar characteristics of her face. Hence her heads are so like those of Alexander the Great that they have been occasionally mistaken for his. Her dress and attributes are adapted to her character. She has a helmet on her head, and a plume nodding formidably in the air. In her right hand she shakes a spear, and in her left grasps a shield, with the head of the dying Medusa upon it. The same figure, with all its terrors and beauties, is also on her breastplate; and sometimes she herself has serpents about her bosom and shoulders.

It was common among the Romans to transfer the distinguishing attributes of their divinities to the statues of their emperors. This kind of flattery was carried by the ancient artists in no point so far as in the Gorgon's head on Minerva's breastplate, as the emperors were fond of this badge of wisdom and strength. There might be made a series of Roman emperors from Augustus to Gallienus with this attribute on their breastplates, except perhaps two or three, of whom scarce any figures remain. The strongest for the dying cast of the eyes is on the bust of Nero at Florence, and answers to Virgil's fine description, Æn. iii. v. 438. There is another on a Domitian, alluded to by Martial, vii. ep. 1.

In most of the statues of Minerva she is represented as sitting, and sometimes she holds in one hand a distaff instead of a spear. When she was depicted as the goddess of the liberal arts she was arranged in a variegated veil, which the ancients called *peplum*. Sometimes Minerva's helmet was covered at top with the figure of a cock, properly, on account of that bird's great courage, held sacred to the deity of war. Some of her statues represented her helmet with a sphinx in the middle, supported on either side by griffins; and on some medals, a chariot drawn by four horses, or, in other instances, a dragon or serpent with winding spires appears at the top of her helmet.

MINIATURE PAINTING. See PAINTING.

MINIUM. [Lat.] *In painting.* According to Pliny, this term meant common redlead, or cinnabar, which the Romans used greatly, extracting it from mines. There was however another substance to which they appropriated the same name, and which was a preparation of calcined lead. This colour is found in greater or less degrees of deepness, in most of the stuccoings and paintings which still exist at Herculaneum.

MINOTAUR. [*minotaurus*, Lat. from Μίνος, King of Crete, and ταῦρος, a bull.] *In the mythology of art.* A celebrated monster, half a man and half a bull. Virgil uses the expression, regarding it, of *biformis;* and the most ancient figures give it a bull's head with human parts below. See BUCENTAUR, CENTAUR, LABYRINTH.

MINT. [*munte*, Dutch, mỳnetian, Sax.] *In architecture.* A building appropriated to the coinage of money.

MINUTE. [*minutus*, Lat.] An architectonic measure; the lower diameter of a column, being divided into sixty parts, each part is called a *minute.*

MINUTIÆ. [Lat. *minutieux*, Fr.] *In all the arts.* See DETAIL.

MIRMILLO. [Lat.] *In archaiology.* A species of gladiator, arrayed according to the fashion of the Gaulish nations, and who was made to combat with the Retiarii and the Thraces. See GLADIATOR.

MIRROR. [*miroir*, Fr.] *In architecture.* A small oval ornament, cut into the deep mouldings, and separated by wreaths of flowers.

MITRE. [*μίτρα*, Gr.] *In costume.* A sacerdotal ornament worn on the head by bishops, and certain abbots, on solemn occasions; being a sort of cap, pointed and cleft at top. The high priest among the Jews wore a mitre or bonnet on his head. The inferior priests of that nation had likewise their mitres, but in what particulars they differed from that worn by the high priest is not now certain. Some writers contend that the earlier bishops wore mitres; but this circumstance is also enveloped in a good deal of doubtfulness. Amongst the primitive followers of Christianity there was a class of young women who professed a state of virginity, and were solemnly consecrated thereto. These wore a purple and golden mitre as a badge of distinction. His holiness the Pope uses four different mitres, which are more or less rich, adorned according to the nature of the festivals on occasion of which they are assumed. The cardinals formerly wore mitres; and some canons of cathedrals in Popish countries have the privilege of wearing the mitre, which is also borne by several families of distinction in Germany as their crest.

But we must look back into remoter ages in order to find the origin of the use of the mitre. It would seem to have obtained primarily in India. According to several authors, it was first a part of female costume, and when worn by a man was considered as indicative of effeminacy. The fillet with which Bacchus is often represented as having his head bound, has been denominated *Mitrephora.*

A peculiar kind of headdress, covering the whole head, is often found depicted on ancient coins, &c. with pendents or pointed dewlaps, by means of which they perhaps tied this kind of mitre under the chin. These ties or dewlaps are denominated by Virgil *redimicula mitræ.* This was probably the Phrygian mitre, for we find Paris with this headdress on a gem published by Natter, and subsequently by Winckelmann, in his *Monumenti Inediti*, No. 112. Priam, and the Amazons, upon the Homeric monuments, and the Parthian kings, upon several medals, have a similar mitre.

The mitre is very frequently met with in early Christian manuscripts, in illuminated missals, and upon the oldest ecclesiastical monuments: this, however, might be expected, since its usage has always been principally ecclesiastic. A statue of St. Peter, erected in the seventh century, bears this mark of distinction, in the shape of a round, high, and pyramidal mitre, such as those worn by each of the popes since. Perhaps this statue offers one of the earliest instances of its usage in the Christian churches.

MITREPHORA. [Lat.] *In the archaiology or mythology of costume.* The peculiar kind of bandage, fillet, or mitre which is often found decorating the head of Bacchus in ancient representations of that deity. See the foregoing article.

MNEMOSYNE. [*Μνημοσύνη*, Gr. memory.] *In mythological painting and sculpture.* The goddess of MEMORY, which word see.

MODE. [Fr. *modus*, Lat.] *In costume.* See COSTUME. See also, in reference to the more enlarged sense of the term mode, the articles on STYLE and TASTE.

MODEL. [*modulus*, Lat. *modèle*, Fr.] *In all the arts.* Speaking generally, this word may be applied to an original pattern of any kind proposed for copy or imitation. It is particularly used, in building, for an artificial pattern formed in stone or wood, or, as is most commonly the case, in plaster, with all due parts and proportions, in order for the more correct execution and conducting of some great work, and to afford an idea of the effect to be produced. Models in imitation of any natural or artificial substance are usually made by means of moulds composed of plaster of Paris.

In painting, this is the name given to a man or woman who is procured to exhibit him or herself in a state of nudity for the advantage of the students. These models are constantly provided in all academies and schools for painting, and it is customary for all the students who have acquired a tolerable use of the pencil to be introduced to this kind of study, and urged to exertion and emulation in it. By this means, the details and proportions of the human shape, the play of the muscles, the varieties of expression, &c. are displayed and inculcated far better than by any course of lectures or any study of former works.

The term model is, however, at the same time extended to the great masters and to their admirable performances, and it is clear that the enlarged meaning we first applied to it fully warrants such an extension.

It is desirable that the living models

used in an academy, or even in a private painting room, should be changed as frequently as possible, or the student is in danger of falling into mannerism. Millin speaks of a model, of the name of Deschamps, who did duty in this way upwards of forty years in the academy at Paris, and grows quite facetious in alluding to the facility with which this person's form and features might be recognised, in every variety of subject or of expression, in all the paintings of the students of that period.

In sculpture a model implies a figure made of wax or terra cotta, or any other malleable substance, which the artist moulds to guide him in fashioning his work, as the painter first makes a sketch, or the architect a design.

MODELLING. [from the verb, *to model.*] *In sculpture and architecture.* When a model of any existing object is to be taken, the original is first to be greased, in order to prevent the plaster from sticking to it, and then to be placed on a smooth table, previously greased, or covered with a cloth, to guard against the same accident: then surround the original with a frame or ridge of glazier's putty, at such a distance as will admit of the plaster resting upon the table, on every side of the subject, for about an inch, or as much as may be thought sufficient to give the proper degree of strength to the mould. An adequate quantity of plaster is then to be poured as uniformly as possible over the whole substance, until it is every where covered to such a thickness as to give a proper substance to the mould, which may vary in proportion to the size. The whole must then be allowed to continue in this way till the plaster shall have attained its firmness; when, the frame being removed, the mould may be inverted and the subject taken from it; and when the plaster is thoroughly dry, it should be well seasoned.

MODESTY. [*modestia*, Lat.] *In emblematical painting and sculpture.* The emblem of this virtue is a young female robed in white, and covered by a veil, with no other ornament besides, except her hair.

MODILLION. [*modillon*, Fr.] *In architecture.* An ornament resembling a bracket, in the Ionic, Corinthian, and Composite cornices.

In Grecian architecture, however, the Ionic order is without modillions in the cornice, as are also the Roman examples of the same order, with the exception of the Temple of Concord, at Rome, which has both modillions and dentils.

A singular example of modillions is to be found in the frontispiece of Nero, at Rome, where they consist of two plain faces, separated by a small cyma reversa, and crowned with an ovolo and bead; and another very remarkable specimen is that of the frieze of the fourth order of the Colosseum, cut on the outside, or projecting part, of a cyma reversa form.

MODIUS. [Lat. from μόδιος, a measure, Gr.] *In the archaiology of sculpture.* This name is applied to a kind of basket frequently seen on the heads of the heathen divinities; this basket is likewise occasionally called CALATHUS, which word see.

MODULE. [*modulus*, Lat.] An architectonic measure; the lower diameter of a column being divided into two parts, one is a *module;* and each module is divided into thirty *minutes;* thus either is not a determinate, but a proportionate measure. See MINUTE.

The term module is also sometimes used with reference to the different sizes of medals. See MEDAL.

MOLE. [Fr. mœl, Sax.] *In architecture.* A mound, or a pier constructed of immense blocks of stone, and thrown into the sea in the form of a dyke, to shelter vessels from the violence and impetuosity of the waves.

Among the Romans, the mole was a species of mausoleum of a circular form, upon a square base, surrounded by columns, and covered with a dome. Such was that of the Emperor Hadrian at Rome, which is at present denominated the Castle of St. Angelo. See HADRIANEIUM.

MONASTERY. [*monasterium*, Lat.] *In architecture.* A convent, or house built for the reception and entertainment of monks, mendicant friars, or nuns, whether it be an abbey, priory, &c. See ABBEY.

MONETARII. [Lat.] *In archaiology.* A maker or coiner of medals or money. These monetarii, with their wives and children, anciently formed a regularly organized body, constantly employed in the fabrication of specie.

The *monetales triumviri* were three individuals who had the surveillance of this body, and the whole management of the mint.

MONEY. [*monnoie*, Fr.] *In the art of engraving.* This word has properly no plural, although former usage admitted of *monies.* Metals coined for the purposes of barter and commerce. The medium of exchange. Medals with an infinite variety of inscriptions, &c. were applied by the ancients to this use. See MEDALS.

MONOCHROME. [μόνος, single, and κρῶμα,

colour, Gr.] *In ancient painting.* A painting with one single colour. This description of art is very ancient, and was known by the Etruscans. It is an undoubted fact, which, indeed, it requires no great extent of credulity to believe, that the first specimens of the art of painting were of one tint only, and the figures introduced all put in with lines of this one only hue, which was most commonly red, made either with cinnabar or minium. Instead of red they sometimes used white paint. Quintilian says of Polygnotus, and Pliny of Zeuxis, that their performances of this kind were of the latter description. The antique tombs of the Tarquins, in the neighbourhood of Corneto, offer several figures painted in white upon a dark ground. The first four plates in the first volume of the paintings of Herculaneum contain several monochromes upon marble. The most numerous monuments existing of this kind of painting are on terra cotta.

As this kind of painting, when adopted from choice, forfeits all the various beauties arising from the use of colours, it is incumbent on the artist to endeavour to make up for this defect by every other attainable excellence, and above all, by those of form and expression.

Monogram. [μόνος, single, or one, and γράμμα.] *In archaiology.* A character or cipher composed of one, two, or more letters interwoven; being a sort of abbreviation of a name, anciently used as a seal, badge, arms, &c. The latter use of it is particularly ancient, as appears from Plutarch, and from some Greek medals of the time of Philip of Macedon, and Alexander his son. The Roman labarum bore the monogram of Jesus Christ, which consisted of two letters, a P placed perpendicularly through the middle of an X, as we find it on many medals of the age of Constantine, these being the two first letters of the word ΧΡΙΣΤΟΣ. Thus, under the Eastern empire it is usual to find MIK, which form the monogram of Mary, Jesus, Constantine.

The use of monograms was exceedingly common upon Greek coins; and many antiquarians have bestowed much time and attention in the effort to decipher them—a useless labour, and equally unavailing as useless; since a great number of these monograms were without doubt of a conventional nature, and understood only by a few even in the times at which the coins were current.

Montfaucon, in his *Paleographie Grecque*, has given a very extensive catalogue of monograms taken from medals of various kinds. Schlæger has furnished another in his *Dissertation sur une Médaille d'Alexandre.* Frœlich has endeavoured to explain several in his *Histoire des Rois de Syrie.* Combe has added an ample collection in his *Description of the Medals in the Cabinet of Hunter.* The Prince Torremuzza has also explained a good many in his *Description des Monnoies de Sicile.* Pellerin, in his *Recueil des Villes, des Peuples, et des Rois,* has given two plates of monograms, elucidating such as are susceptible of elucidation. But we will not swell our list of learned works further, for the reason alluded to above.

Monolithal. [μόνος, one, and λίθος, a stone.] *In archaiology.* Works constructed of one single stone. The Romans had no word expressive of this kind of performance, although they had several examples of it. Laberius, it is true, speaks of "monolithal" columns, but we are inclined to regard it as a solitary instance. Pliny, speaking of the Laocoon, says that it is *ex uno lapide*, but does not use this peculiar term. Strabo and Diodorus have both written about monolithal pillars: and Herodotus talks of a chamber (cut in a rock), which was hewn out of one tremendous block. It was pretended that the same monstrous excavation was subsequently removed, by order of a certain king Amasia, from Sais to the city of Elephanta, and the removal employed three thousand men during three years. In Lower Egypt, at some distance from Alexandria, several grottoes, and other subterranean structures have been discovered, but these cannot be traced back to any very remote age. M. Denon, the intelligent French traveller in Egypt, has given representations of some of these, together with sundry little monolithal temples.

Monopodium. [μόνος, one, and πόδιον, from πους, a foot.] *In archaiology.* A table with but one leg. These kind of tables were used for the purposes of repast. In the luxurious times of the Romans, they were constructed of maple wood, sometimes of citron, and were supported by one branch or leg often ornamented with silver or ivory richly worked. The price of these tables was enormous, particularly if the grain of the wood presented a variety of colours. The lower part, or platform, of these tables was designated the abacus, and the artist sought always to give it the most elegant shape possible. Among the antiquities published by Caylus several specimens of monopodions are to be found, which were executed in stone or metal, and adorned with sculptures;

and one example is extant among the bronzes of Herculaneum.

The usage of tables with single feet or claws is now very common, and indeed, as our readers well know, the handsomest articles of the kind wear this shape when their size will at all admit of it.

MONOPTERAL. [μόνοπτερος, Gr.] *In architecture.* This term is used to denominate a round temple without a cell. They have each a tribunal or throne, and are ascended by steps of one-third of the diameter of the temple; the columns, placed on pedestals, are as high as the diameter of the temple, taken at the outer side of the pedestals: their thickness is one tenth part of the height of the shaft and capital: the height of the architrave is half the the diameter of the column: the frieze, and other ornaments above, may be according to the general rule.

MONOTONY. [μόνος and τονῶ, a sound, Gr.] *In all the arts.* Want of variety: undue preponderance of any part of a picture or building over another: sameness of colour, or of style.

MONOTRYGLYPH. [Gr.] *In architecture.* The space of one triglyph and two metopes between two Doric columns.

MONTMORILLON. [Fr.] *In the history of the arts.* The name of a small town, about eight leagues from Poictiers, long celebrated for a Druidical temple (at least such it is supposed to have been), the remains of which are still to be found there. Montfaucon, in the Supplement to his *Antiquité expliquée*, and Martin, in his *Religion of the Gauls*, have given engravings of this structure, both of its elevation and plan, inclusive of the monstrous figures which remain at its portal, and which they regard as the statues of Gaulish divinities. Martin does not scruple to recognise one of these as being meant for a personification of the moon, and concludes therefrom that this edifice must have been dedicated to the lunar goddess. Millin, on the other hand, affirms, that he has examined both the building and its appendages with great care, and is of opinion that it is neither more nor less than the relics of an old church, possibly of the tenth or eleventh century, and that the statues are merely fantastical, and bear no specific meaning.

MONUMENT. [*monumentum*, Lat. from *moneo*, to remember.] *In architecture.* A structure erected to commemorate any given person or event: such, for instance, as a triumphal arch, a mausoleum, a pyramid, &c. The word is also used, in a more general sense, to denote any relic, extant at this day, of ancient times.

Every monumental trophy, being designed to attract the public observation, and to perpetuate the memory of the individual to whom it is dedicated, should be situated in as exposed a place as possible. The ancients, in this spirit, always raised them in the roads and walks most frequently resorted to. Thus, at Athens, in one of the public promenades which consisted of a covered portico, the most laudable actions of the illustrious citizens were inscribed and signalised in various ways. It was under this portico, called Στόα, that Zeno taught philosophy; whence his disciples attained the well known appellation of stoics.

As we have before had occasion to observe, in speaking of Inscriptions (which word see), the attention of the artist in framing a monument should be especially directed not only to the capabilities for display he might possess in another sense, but to consistency in the matter, weighing well the nature of the person or circumstance he may have to commemorate. It would be absurd, for instance, to honour private or peaceful virtues by the erection of a triumphal arch, or to celebrate an event calculated to affect the destinies of a great nation by a monument of unassuming simplicity, even although it should be in the best possible taste.

As we observed above, the Greeks were particularly anxious to impress the recollection of their great citizens on the mind of the populace. Even their sepulchral monuments, instead of being clustered together in the burial grounds, wherein no one will stop one moment longer than he can help, or in the interior of a church, which is very seldom visited except for purposes quite foreign to the examination of tombs, were placed along the public walks and roads, so that the Grecian traveller could not proceed a mile without his attention being called to some freshly erected monument, calculated to excite his emulation or patriotism.

As courage and military talent were chiefly requisite for the support of the republics of Greece, it is to be expected that we should find numerous monuments were erected in commemoration of different generals and warriors who had fallen in defence of their country. At Sparta they erected two statues to the honour of Pausanias, the Grecian commander in the battle of Platœa; and Pollux had a trophy constructed at Sparta likewise, in

celebration of his victory over Lynceus. The Argivi built a monument in their city of Argos, to record their conquest of Laphaes, who had endeavoured to subjugate them. The Mantineans raised one also in memory of a victory gained by them over the Lacedæmonians and their king Agis. In short, we might, were it necessary, go on multiplying examples to a very great length indeed.

The Romans held the same custom, and commemorative trophies were frequently erected by them to their generals, both in Rome and in the provinces. Pope Sextus V. adorned the Capitol with two beautiful antique monuments in marble, which had been discovered among the relics of the ancient city. Common opinion has explained these to be the trophies of Marius raised on his defeat of the Cimbri; but the character and style of the workmanship seem rather to refer them to the age of Trajan. We may consider as a monument of this kind, the marble column erected at Rome in commemoration of the naval victory gained by Duilius over the Carthagenians. It is decorated with the prows of ships, and thence denominated the Rostral Column; and it is still preserved beneath the Capitol.

The Greeks were also in the habit of dedicating monuments to the conquerors in the public games. Near the temple of Neptune, upon the isthmus of Corinth, were statues of this nature; as there were likewise in the vicinity of Olympius, at Sparta, and elsewhere.

All these ancient commemorative monuments differed in point of size and magnificence. Some were truly splendid. Those which were particularly distinguished in this way were the CHORAGIC MONUMENTS among the Greeks, and the TRIUMPHAL ARCHES among the Romans. See those words.

Thus we perceive even the warlike achievements of the ancients were made instrumental to the cultivation of the elegant arts of peace. But where, we may be allowed to ask, are *our* memorials of splendid victories, whether naval or military?—Waterloo has not yet produced a single grand picture; nor has Nelson received any public national honours but a statue among the sculptures of St. Paul's Cathedral:—Nelson, a name equal almost to any in history; a man who lived and died in the active service of his country. Had he been a Roman, the metropolis and provinces would have abounded with his triumphal arches and his statues. There are, it is true, Matthew Wyatt's fine group at Liverpool; the column erected by his fellow countrymen at Yarmouth; and Westmacott's bronze statue at Birmingham, executed by subscription of the inhabitants: but we are speaking of national honours.

The monumental column erected to Nelson at Yarmouth (after the design of Mr. Wilkins, architect of Downing College, Cambridge), is of the Grecian Doric, raised on a pedestal, and surmounted by a statue of Britannia; being in the whole one hundred and forty feet high, overlooking the sea from a small eminence on a beach. A friend of the present writer has thus beautifully described it (in imitation of an ancient Greek poet), in the *Annals of the Fine Arts:*

"Thy tomb, thus proudly o'er the ocean gazing,
Shall view each passing sail,—to deeds of might
Exhort the seamen,—and when fires, war blazing,
Burst from embattled ships, shall stand spectator of the fight."

LEEDS.

Is not our government, so liberal in other respects, somewhat culpable in the want of instances of monumental gratitude to the great warriors, statesmen, and orators who have embellished the present era? The moderns, however, speaking generally, have not perpetuated this practice in any great degree, nor will our space admit us to enlarge on the instances which might be adduced. The art of the sculptor has been abundantly employed in the interior of our religious buildings, to the memory of departed excellence, or as a tribute of surviving affection: but this is not precisely that sense of the term monument, in which we have been regarding it. The most recent case in point that has occurred in our own country is the colossal statue of Achilles, erected in Hyde Park to the heroes of Waterloo, and which is very noble both in character and dimensions. This public monument has been somewhat fastidiously, we think, objected to, on the score of indelicacy: it is true, the special nature of the dedication might have been omitted.

The Abbé de Lubersac has published a judicious work on the subject of our present article, entitled *Discours sur les Monumens publics de tous les Ages et de tous les Peuples*, folio, Paris, 1776. On the style of erecting monuments the reader may consult, amongst other treatises, *Reflexions sur l'Architecture*, by the Abbé Langier; the seventh chapter of vol. 2 of *Cours d'Architecture*, by Blondel; and the second

part of *Principes d'Architecture Civile*, by Miliza, third book and fifth chapter. See ARCHITECTURE, COLUMN, &c.

MOON. [*μήνη*, Gr.] *In the mythology of art, and in painting, drawing*, &c. The changing luminary of the night, called by the poets Cynthia or Phœbe. The ancient artists represented the moon allegorically by the divinities who are said to have presided over its course, such as Diana, Isis, Lunus, &c.

The different appearances of the moon are very numerous; sometimes she is increasing, then waning; sometimes horned, then semicircular; sometimes gibbous, then full and round. Sometimes, again, she illumines us the whole night, sometimes only part of it: sometimes she is found in the southern hemisphere, sometimes in the northern: all which variations having been first observed by the ancient Grecian Endymion, who watched her motions, she was fabled to have fallen in love with him. The source of most of these appearances is that the moon is a dark opaque and spherical body, and only shines with the light she receives from the sun; when only that half turned towards him, at any instant, can be illuminated, the opposite half remaining in its native darkness. The face of the moon, visible in our earth, is that part of her body turned towards the earth; whence, according to the various positions of the moon, with regard to the sun and earth, we observe different degrees of illumination; sometimes a large and sometimes a less portion of the enlightened surface being visible.

The artist will find it greatly to his advantage to study different effects of moonlight. There are various subjects for which that species of illumination is far better adapted than the gorgeous splendour of the sun:—A quiet landscape, for instance, lying in the stillness of the drowsy summer air; a picture of domestic repose, such as an assembled family; or scenes of an amorous or luxurious nature, such, for example, as the exquisite evening festivities described in the Decameron of Boccaccio. Marine subjects also afford ample opportunities for effects of moonlight; but, above all, representations of deserted mansions, or of ruined buildings, are susceptible of their greatest and most touching expression from the introduction of this soft radiancy.

If thou wouldst view fair Melrose aright,
Go visit it by the pale moonlight:
For the gay beams of lightsome day
Gild but to flout the ruins gray.
When the broken arches are black in night,
And each shafted oriel glimmers white;
When the cold light's uncertain shower
Streams on the ruin'd central tower;
When buttress and buttress, alternately
Seem framed of ebon and ivory;
When silver edges the imagery,
And the scrolls that teach thee to live and die:
Then go—but go alone the while,
There view St. David's ruin'd pile;
And, home returning, soothly swear
Was never scene so sad and fair.
Scott's Lay of the Last Minstrel.

The reader is referred to our article LIGHT, many observations in which will apply, with certain modifications, to the present subject.

MOORISH ARCHITECTURE. See SARACENIC.

MORAL. [*moralis*, Lat.] *In painting*. By this term we designate a species of historical painting, which, however, does not select any particular scene or incident, complete in itself, and presenting itself singly to the mind of the spectator, but tells a story, in all its different stages and bearings. The most illustrious examples of this style of painting are to be found in the invaluable works of our great countryman, Hogarth; the enrolment of whose name among British artists enables us to look with some complacency on the productions of foreign masters.

Much more use might, we think, be made of this style of art than hitherto has been. In the hands of an artist of talent it cannot fail, indeed, to be highly effective. A series of paintings of this kind possesses a diffusive and continuous interest, and we almost imagine ourselves personally acquainted with the individuals represented. It is true, it can hardly be expected that we shall meet again with such specimens of real life, both comic and tragic, as are presented to us in the *Rake's Progress*; or, the *Marriage-à-la-Mode*. The profuse character and ludicrous extravagances of the *March to Finchley*, or of the *Election Dinner*, contrasted with the grotesque and unspeakable horrors of *Gin Lane* or of *Beer Street*, are not likely to be disturbed in our imagination by any new aspirant after similar fame. These, together with the other performances of the same powerful hand, form a *genre*—a class—distinct and peculiar in themselves. Still, there are many able painters now living in this country whose canvass we should be highly gratified to find employed in this manner—we will just name, in passing, Wilkie and Mulready: and we have seen, in the unassuming and ephemeral sketches of Cruikshanks indications by no means to be overlooked of genius for

sins for purposes of ablution, and wherever it is possible, a grove or court planted with trees, to afford retirement for prayer. These churches do not bear the names of their founders: the emperors or sultans having reserved to themselves the privilege of designating them.

As it is held unlawful to enter the mosque with shoes or stockings on, the pavement is strewed with pieces of stuff sewed together, and sufficiently wide to accommodate each a row of men either in the posture of kneeling, sitting, or prostrate. The women are never suffered to enter the mosques. Many of these buildings possess in their immediate vicinity, and, indeed, attached to their establishment, a kind of hospital, in which travellers, of every denomination or persuasion, are entertained during the space of three days. Each temple has also a place, which they denominate turbe, and which is employed as the burying-place of its founders: within is a sepulchre covered with green satin or velvet, and of about the length of seven feet, with tapers burning at the ends, and seats around for those who read the koran and pray for the repose of the souls of the dead.

The mosque of St. Sophia, at Constantinople, is equally celebrated throughout Christendom and Islam for its beauty, magnitude, and splendour.

MOTION. [*motio*, Lat.] *In painting, sculpture, &c.* Motion is an essential attribute of art. As every man has movements peculiar to himself, some spontaneous and lively, others slow and intentional, according to the natural disposition of the individual, a very slight degree of observation will suffice to render the artist acquainted with the several varieties of bodily action proper to express the different emotions of the mind. The Greeks were exceedingly eminent in this way, as in most other things connected with the fine arts. Every kind of motion which is implied in their figures, whether in painting or sculpture, is easy, natural, and graceful. Motion is perfectly distinct from *action* (which word see), since the former is merely muscular, and often occurs when both mind and body are in a state of repose; whereas the latter implies premeditation and exertion.

MOTTO. [Italian.] *In engraving and sculpture.* A sentence or word added to a device on seals, rings, or tablets. See INSCRIPTION, LEGEND.

MOULD. [*mollo*, Spanish.] *In the art of statuary.* The matrix in which any thing is cast, or receives its form. The moulds used by founders of large works, such as statues, &c. are composed of wax, supported withinside by what we denominate a core, and covered withoutside by a case or cap. It is in the space which the wax took up, which is subsequently melted away to leave it free, that the liquid metal runs, and the work is formed, being carried thither through a great number of little canals, which cover the whole mould.

MOULDER. [*from to mould.*] A man employed in the moulding works of sculpture.

MOULDINGS. *In architecture.* Those parts which project beyond the base or perpendicular face of a wall, column, &c. intended only for ornament, whether round, flat, or curved; the regular mouldings are, 1. the list, or cornice; 2. the astragal, or bead; 3. the cyma recta, or ogee; 4. the cyma recta; 5. the cavetto, or hollow; 6. the ovolo, or quarter-round; 7. the scotia; 8. the torus.

"By examining the antiques, it will be found (says Sir William Chambers), that, in all their profiles, the cyma and the cavetto are always used as finishings, and never applied when strength is required: that the ovolo and talon are always employed as supporters to the essential members of the composition, such as the modillions, dentiles, and corona: that the chief use of the torus and astragal is to fortify the tops and bottoms of columns, and sometimes of pedestals, when they are frequently cut in the form of ropes; and that the scotia is employed only to separate the members of bases, for which purpose the filet is also used, not only in bases, but in all kinds of profiles.

"An assemblage of essential parts and mouldings is termed a profile; and on the choice, disposition, and proportion of these depends the beauty or deformity of the profile. The most perfect are, such as are composed of few mouldings, varied both in form and size, duly applied with regard to their uses, and so disposed, that the straight and curved ones survived each other alternately. On every profile there should be a predominant member, to which all the others ought to be subservient, and seem made either to support, to fortify, or to shelter it from the injury of the weather, as in a cornice when the corona is principal, the cyma or cavetto cover it, and the modillions, dentiles, ovolo, and talon support it.

"When ornaments are employed to adorn the mouldings, some of them should be left plain in order to form a proper repose; for when all are enriched, the figure of the profile is lost. In a cornice the corona should not be ornamented, nor the modillions

band; neither should the different facies of architraves, the plinths of columns, fillets, nor scarce any square number be carved; for they are, generally speaking, either principal in the composition, or used as boundaries to other parts; in either of which cases, their figures should be distinct and unembarrassed. The dentele band should remain uncut, when the ovolo and talon immediately above and below it are enriched; for, when the denteles are marked, particularly if they be small, the three members are confounded together, and, being covered with ornament, are much too rich for the rest of the composition; a fault carefully to be avoided, as the just and equal distribution of enrichments is on all occasions to be attended to. For, in effect, the articles of sculpture, in architecture, are like diamonds in a lady's dress, with which it would be absurd to cover her face, and other parts that are in themselves beautiful.

"When mouldings of the same form and size are employed in one profile, they should be enriched with the same kind of ornaments. It must be observed that all the ornaments of mouldings are to be regularly disposed, and answering perpendicularly above each other; the middles of the modillions, denteles, oves, and other ornaments, all in a line; for nothing is more confused and unseemly than to distribute them without any kind of order. The larger parts are to regulate the smaller; all the ornaments in the entablature are to be governed by the modillions or mutules; and these are to be dependent on the intervals of the columns, and so disposed that one of them may correspond with the axis of each column. It is farther to be observed, that the ornaments must partake of the character of the order which they enrich; and those used in the Doric and Ionic orders must be of a simpler kind and grosser make than those employed in the Composite and Corinthian."

Thus far Sir Wm. Chambers: and we beg leave, in conclusion, to refer the reader to our several articles entitled ARCHITECTURE and COLUMN.

MOUNTING. [*montant*, Fr.] *In the arts of design.* The act of straining a print or drawing upon canvass, or of placing it upon an ornamental frame.

MOURNING. [from mupnan, to mourn, Sax.] *In the archaiology of costume.* The method of mourning among the ancients was to abstain from all ornaments, jewels, &c. and even from superfluities of other kinds, such as the bath and the enjoyments of the table: the greater number of nations we find, also adopted the custom of wearing mournful garments, &c. These differed in colour, with different nations, through all the variety of hues from black to white. The Greeks and the republican Romans adopted black as a symbol of mourning, or rather perhaps a very dark brown. Under the emperors, the ladies changed that colour for white, or at all events white veils. The Romans left their beard and hair to grow at random during the time of mourning, while the Greeks, on the other hand, cut theirs off.

MUMMY. [*mumea*, Lat. *momie*, Fr. from the Arabic.] *In archaiology.* A dead body preserved by the Egyptian art of embalming.

Principles of religion, and the nature of the climate were undoubtedly the principal motives that induced the ancient Egyptians to embalm and preserve the bodies of men and animals. It is a custom of the most remote antiquity. The word mummy, which has not its origin in either the Greek or the Latin languages, appears not to have belonged even to the Egyptian; for St. Augustine says that the Egyptians gave to bodies prepared after this manner the name of *gabbaras*. Some writers derive it from the Arabic *mum* which signifies wax.

Ancient authors have conveyed to us but very insufficient details relative to the preparation and preservation of mummies. The plain of Saccara or Sakkara, in the environs of the ancient Memphis, is the place from whence the greatest quantity of mummies have been taken, but very few have been brought away unbroken or entire; the cause of this is the avarice of the Turks and Arabians, who will scarcely ever deliver them to travellers before they have broken them open, to see for jewels or other valuables they suspect may be enclosed therein. The outer case of the mummy is generally of some common wood, sometimes of oriental cypress or sometimes of sycamore. At the upper part is generally a mask drawn on the face, and oftentimes under the chin is a lock of hair in the form of a bunch. Authors are not decided as to the meaning of this bunch, some taking it for a beard, and others for the leaf of the plant persea, which is consecrated to Isis. In the female mummies, and in general in the female figures of Egyptian workmanship, this mark is not to be found, which gives some weight to the opinion of those who take it for a beard. On the coverings of their coffins are also found the representation of a face, from which some have supposed them to be portraits of the de-

ceased; but they have in general such a perfect resemblance one to the other that they cannot long be conceived to be any thing else than ornamental. Some have conjectured, and with much appearance of truth, that the figure of Osiris was represented on the mummies of men, and Isis on those of females. On the examination of a mummy that was in the possession of the University of Gottingen it was remarked that a face was painted on the bands that enveloped the body, and it had under the soles of its feet several folds of linen. In some mummies the nails of the feet and hands have been found to be yellow, but I find no authority of any having been discovered gilt, according to common report. In the interior of many have been found small images, amulets, beads, nilometers (see these several words), &c. many of which taken from mummies are to be seen in the Eighth Room under the head of Egyptian Antiquities of the British Museum, where are also two of the finest mummies, and in the best state of preservation now in Europe; one of which was with its coffin sent to England by Edward Wortley Montagu, and presented to the Museum by his present Majesty; and the other which was found in one of the catacombs, at the before mentioned Sakkara, about four leagues from Cairo, was sent to England by Colonel William Lethieullier, who, on his death, bequeathed it to the Museum.

A mummy that was opened by Mons. Blumenbach, had artificial eyes made of cotton cloth prepared with resin.

The Imperial Library at Paris has a mummy which was formerly in the church of St. Geneviève, but which is much broken and otherwise damaged, and the coffin of one extremely well preserved. It is ornamented like the others with hieroglyphic paintings, which are also sometimes found delineated on the bands of cloth with which the body is enveloped. (See HIEROGLYPHICS.) They have also a heap of linen, which they conjecture to have been taken from a mummy, on which is represented the ceremony of embalming. In the same plain of Sakkara beforementioned, and in the same catacombs where the human mummies are found, are also a great number of the mummies of sacred animals. Mons. Denon, in his voyage into Upper and Lower Egypt, visited these sepulchres, in one of which he found more than five hundred mummies of the Ibis. The pots and vases which contained them and served for sarcophagi, were made of common red earth, from fourteen to eighteen inches in height; one would almost be inclined to doubt their antiquity, so well are they preserved. In the 99th plate of the quarto French edition of Denon's Travels are engraved several representations of these mummies. The British Museum has in the same room with their valuable mummies, many of these vases, the lids of which are severally adorned with a head of Isis, a hawk, a wolf, or a baboon, several fragments of statues; of sistrums, amulets, and a great variety of other monuments of art, which serve to illustrate the religious worship of the ancient Egyptians. The same traveller (Denon) has also published a very curious account (page 281 of the quarto Paris edition of his Travels) of the opening and developing of one or two of these mummies that were given him; to which work we refer for more detailed particulars.

In general these mummies of the Ibis are enveloped with bands of cloth, wrapped and interlaced with much care. The head and feet are hidden under the wings, and the whole compressed into a conical form. All of them are not enclosed in vases or urns; some have been found that are swathed with much care, excepting the head and beak which are left uncovered; these are but few, and their arrangement is the same as the human mummies, and are placed standing upright. Mons. Chrét-Aug. Langguth has published an engraving of one, that accompanies his dissertation entitled *De Mumiis Avium in Labyrintho apud Saccarum repertis*, &c. Vilebergæ, 1803, 4to. This description tallies exactly with the mummy of an Ibis they have at present in the Imperial Library at Paris. This bird, which was much adored and revered in ancient Egypt, is the same which still inhabits those countries. This is ably demonstrated by a French naturalist, in the dissection and anatomy of the mummy of an ancient Ibis, and that of a modern one, compared together; both the skeletons are kept in the Museum of Natural History at Paris for the gratification of the curious. The British Museum at London has the skeleton of one of these birds; but we are not told whether it is of a mummy or a modern bird. See IBIS, HIEROGLYPHICS, &c.

There are several interesting publications on the mummies of men and of animals, to which those who would enter more fully into these matters are referred, viz. HERODOTUS, lib. ii; DIODORUS SICULUS, lib. i. cap. 91; *Le Voyage de Corneille* LE BRUN *en Perse;* Athanasii KIRCHERI, *Diatribe Hieroglyphica de Mumiis*, Amste-

lodami, 1674, in folio; Olai Wormii, *Museum*, page 30 and following; *Voyage de* Gemelli Careri, vol. i. page 113; Ludov. Penicher, *Traité des Embaumemens selon les Anciens et les Modernes*, Paris, 1699, 12mo.; Andreæ Gryphii, *Mumiæ Wratislaviensis*, Wratislav. 1662, 12mo.; *Lettre d'un Académicien, où sont expliquées les Hiérogliphes d'une Momie d'Egypte*, Paris, 1692, in 4to.; Frider. Gottlieb Kettneri, *Historicum schediasma de Mumiis Ægyptiacis*, &c. Leipsig, 1694, in 4to. and 1703, in 8vo.; *Mémoires de Trévoux*, 1705, page 429, 441; and 1740, page 476—495; Christ. Herzog, or rather Godofredi Vockerodt, *Mumographia Medica*, &c. Gotha, 1717, in 8vo.; Roberti Ainsworth, *Tractatio de Egyptiorum Funeribus*, London, 1720, in 8vo.; Alexander Gordon's *Essay towards explaining the Hieroglyphical Figures on the Coffin of an ancient Mummy*, London, 1737, folio; Congers Middleton, *Descriptio Mumiæ Cantabrigiensis*, Londini, 1745, 4to.; *Sur les Egyptiens et les Momies*, par Joh. Frid. Blumenbach, in the Gottingen Magazine, part first, page 109–139. Christ. Guil. Franc. Walchii, *Prælectio de Mumiis Christianis*, in *Commentation. Societatis regiæ Scientiar.* Gottingen, 1780, vol. iii.; Heynii, *Observationes de Antiquitate Mumiarum*, in the *Commentat. Soc. Gotting.* for the year 1781, vol. iv.; Andr. Rivini, *De Balsamatione*, Lipsiæ, 1655, 4to.; Melchior Sebiz, *De Balsamatione Cadaverum humanorum*, Argentorat, 1649, 4to.; Christ. Hofmann, *Dissertatio de Pollincturæ Antiquitate*, Jenæ, 1669, 4to.; Josephi Lanzoni, *Tractatus de Pollincturæ et Balsamatione apud Veteres*, &c. Ferrariæ, 1693, Geneva, 1696, 12mo.; Rouelle, *Sur les Embaumemens des Egyptiens*, vide *Mémoires de l'Académie des Sciences des Paris*, 1750; Caylus, *Des Embaumemens des Egyptiens*, vide *Histoire de l'Académie des Inscriptions*, vol. xxiii. The same author, *Recueil d'Antiquités*, vol. vi. plate 11, fig. 1; *Lettres de* Savary *sur l'Egypte*, 8vo.; Shaw's *Voyages in different Countries of Barbary*; *Recueil d'Antiquités, par* La Sauvagere, Paris, 1769, 4to. page 328; Jo. Henrici Schulze, *Dissertatio inauguralis de Mumiâ*, Halæ, 1737, in 4to.; *Discours abrégé touchant les Momies, et les Cérémonies de l'Embaumement*, &c. *par* L'Abbé Fauvel, Paris, 1726, in 8vo.; *De Mumiis Acium in Labyrintho apud Succarum repertis Prolusio, auctore* Christ. Aug. Langguthio, Vitebergæ, 1803, 4to.

Musaic or Mosaic. [*μουσαϊκον*, Gr. from *μοῦσαν*, *μουσαϊκὸν*, polished, elegant, or well wrought.] *In painting.* A kind of painting executed with small pieces of glass or wood, pebbles, enamel, &c. fixed upon any given surface by means of mastic. Although this branch of art was well known and much practised by the ancients, Pliny has spoken of no express style, nor has he particularized any of the artists who wrought in it. We can only judge therefore by the appearance of antique relics of this kind, and by comparing them with modern performances, the method of executing which is known to us. When an artist commences a work in musaic, he cuts in a stone plate a certain space, which he encircles with bands of iron. This space is covered with thick mastic, on which are laid, conformably to the particular design, the various substances meant to be used. During the whole of his work, the artist must have his eye constantly fixed on the picture which it is his object to copy. The mastic in time acquires the consistency of stone, it is susceptible of a polish like crystal. However, as the brilliancy thus acquired is injurious to the effect of the design itself, which is not clearly perceived through it, those musaics which are applied to the adornment of cupolas, cielings, &c. are generally less elaborately polished, the distance from which they are viewed preventing the spectator from detecting the inequalities of surface, or the interstices between the pieces of which the work is composed. The means have been discovered of giving to the colour of glass so many different shades, that it has been found to serve the purposes of all the various descriptions of painting. The artist, in mosaic, has all his various materials ranged before him in compartments, according to their several tints, in much the same way as the printer arranges his different letters. To Pompeo Savini, of Urbino, has been attributed the art of executing mosaics in rilievo.

The origin of mosaic-work must, apparently, be sought in the East, the rich carpets of which were imitated in hard stone. It is probable that the art was known to the Phœnicians, but to the Greeks its perfection and glory are to be attributed. From Greece it passed with the other ornamental points of knowledge into Rome, towards the end of the republic, the Italian conquerors of Greece transporting from that country into their own the most beautiful specimens, in the shape of pavements, &c. which they could discover. Sylla was the first Roman who caused a piece of mosaic-work of any magnitude to be executed for the temple of Fortune at Præneste (now Palestrina) which mosaic, at least a great portion of it, still exists. At

first they ornamented in this manner the pavements of buildings merely, but after awhile the walls and arched cielings also. The tents of the generals, in time of war, were also paved thus, to keep off the humidity of the ground, as Suetonius reports of the tent of Julius Cæsar. The invention of coloured glass was a great discovery for the purposes of musaic work.

When the dark ages had driven the elegant arts out of Italy, musaic work, as well as painting and sculpture, was preserved a considerable time amongst the Byzantian Greeks, who used it to adorn the altars of their churches. Towards the conclusion of the thirteenth century, an Italian of the name of Tafi learnt to work in mosaic of a Greek called Apollonius, who decorated the cathedral of St. Mark at Venice, where is still preserved an admirable pavement executed by him. But in general these works are wanting in design, are in bad taste, and equally bad in colouring. Since then, the art has been brought, in Italy, to a very high degree of perfection. Pope Clement the Eighth, at the commencement of the seventeenth century, contributed much to this end by adorning in musaic all the interior part of the dome of St. Peter's. Among the earliest artists employed thereon were Paul Rossetti and Francis Zucchi.

One of the greatest advantages of mosaic is its power of resisting all those things which ordinarily affect the beauty of painting, and another the facility with which one can repolish it without at all hazarding the brightness and effect of the colouring. At the same time, as it can only be worked slowly, and requires great exertion, it can never come into such general use as painting: nor would it have attained the degree of perfection which it did at Rome and Florence, had not the respective governments of those two states made a point of encouraging it.

In modern times, a species of musaic, and a very beautiful one too, has sprung up under the name of MARQUETRY. (See that word.) The pebble and shell work of which grottoes are composed may likewise be regarded as a species of musaic, and there are several other varieties, which it would be beyond our limits to enumerate.

Among the most beautiful musaics preserved in the pavements or walls of ancient buildings, we may particularize that found in a chamber in Hadrian's villa, near Tivoli; the Palæstrine musaic, before alluded to, and which is remarkable for the light which its delineations throw on the history, local and natural, of Egypt. In the villa Albani is also a beautiful mosaic discovered in the territory of Urbino, which represents a school of philosophers, and another, depicting the history of Hesione, daughter of Priam. In 1763, was found, in a villa near Pompeii (probably that of the Emperor Claudius), a mosaic representing three females with comic masks, and playing on various instruments. The name of the artist (Dioscorides of Samos) was engraven thereon in Greek letters. There are besides a very great number of others, which have been at sundry times dug up, and which present a greater or less degree of beauty and of excellence in the art.

The principal works to be consulted on the theory and practice of musaic or mosaic-work are the following:—Ciampini, *On the Mosaics of sacred and profane Buildings*, Rome, 1690, 1699, 2 vols. folio. Besides mosaics, this work also presents engravings of the temples constructed since the time of Constantine the Great. Furietti, *On Mosaics*, Rome, 1752, 4to. with engravings. The above two works were written in Latin, and a French translation of them appeared at Paris in 1768, in 8vo. under the title of *Essai sur la Peinture en Mosaïque, par* M. de Vielle; *ensemble une Dissertation sur le Pierre spéculaire des Anciens:* which work comprehends treatises on the origin of mosaic, on the etymology of the word, on the different methods of the Greek artists thereon, &c. Paciaudi, in his book *De sacris Romanorum Balneis*, Rome, 1748, has also treated of this subject, as likewise has Buonarotti, in his *Observations on the Glass of the Ancients*, 4to. Florence, 1716. Piacenza, in the first vol. of his edition of *Notizie dei Professori del Disegno da Cimabue in quâ*, by Baldinucci, 4to. Tor. 1768, has inserted an intelligent paper on the subject of musaics. Fougeroux de Bondaroy has written a *Traité sur la Fabrique des Mosaïques*, at the conclusion of his *Recherches sur les Ruines d'Herculanum*, Paris, 1770, 8vo. Caylus has also treated of them in his *Essai sur la Manière de peindre en Murbre*, in the Memoirs of the Academy of Inscriptions, vol. xxix. To conclude, a German author of the name of Gurlitt has published a particular dissertation on the same subject.

The most curious works containing descriptions and explanations of antique mosaics, are:—*Opus Musivum erutum ex Ruderibus Villæ Hadriani*, Florence, 1779. The drawings of this work are by Caj. Savorelli; the engravings executed by

Capellani. The musaic here treated of represents a chase. *Observations sur la Mosaïque des Anciens, à l'occasion de quelques Tableaux en Mosaïque, qui se trouvent à la Galerie des Peintures de l'Electeur palatin*, by the Abbé Hæffelin, in the *Comment. Histor. Academiæ Theodoro Palatinæ*, vol. v. No. 3. p. 89, Manheim, 1783, 4to. This author compares musaics in glass and stone with the pictures executed among the native Americans in feathers of birds, and also with tapestry. *Explication de la Mosaïque de Palæstrine*, by the Abbé Barthelemy, Paris, 1760, 4to. and also in the Memoirs of the Academy of Inscriptions, vol. xxx. Kircher, in his *Latium*, and Montfaucon, in the fourth vol. of his *Supplément de l'Antiquité expliquée*, had already endeavoured to give an analysis of that celebrated monument of art. *Osservazioni* di Ennio-Quirino Visconti, *su due Musaïci antichi istoriati*, Parma, 1788, 4to. *Description de la Mosaïque trouvée à Séville*, published by order of the late King of Spain. *Mosaïque d'Italica*, published in 1802, by M. Alexandre La Borde, which is the best executed of any collection of representations of musaics: the plates in this work may be safely recommended as models.

Among the most distinguished artists in this style may be enumerated the following:—Gaddo de Gaddis, who died in 1312; Angelo Bondone, called Giotto, died 1336; Dom. Ghirlandajo, died 1493; Pietro Oda, died 1500; Franc. and Valerio Zuccari, in 1545; Alex. and Franc. Scalza, Ferd. Sermei, Giov. Fratini, Louis Ricci, Thom. Brandus, Gab. Mercanti, towards 1550; Louis Cajetano, 1559; Ang. Sabattini, Bernasconi, Ambr. Giosio, Vitalde Massa, P. Lambert de Cortona, Cruciano de Macerata, Giov. Cataneo, Fr. Zuccha, P. Rosetti, and Cæsar Torelli, who departed this life towards the end of the fifteenth century; Giov. Calandra, died 1644, having invented a mastic for fixing the pieces in a manner more solid than had been hitherto practised; Giov. Merlini, Giov. Ciachetti, Bottini, Cosm. Chermar, Giov. Giorgi, Lor. Bottini, Giov. Bianchi, Carlo Centinelli, and others whom Baldinucci cites as the first artists employed in the fabrication of the musaics of the Gallery of Florence, and who died about the middle of the seventeenth century. At the same epoch flourished also Marc Spina, Oraz. Manetta, and Matth. Piccioni: Marcel. Provenzale, who died in 1693; La Valette, 1710; Nic. Brocchi, 1713; Phil. Cocchi, Nic. Onuphrio, Bern. Regolo, Funo, Guil. Palat, Franc. Fiano. The city of Paris, a few years ago (and perhaps still), possessed a school of painters in musaic, directed by M. Belloni. See CRUSTA, INCRUSTATION, LITHOSTROTON, &c.

MUSCARIA. [Lat.] *In archaiology.* A peculiar description of fans, used among the ancients, and often composed of the feathers of birds. Branches of trees were, however, no doubt, in the most remote times, used for the pleasant purpose of agitating the air in sultry weather. Upon several vases and other antique monuments we observe figures holding in their hands this kind of instrument, in the majority of instances shaped like a leaf. It was customary, in the classical ages, and still is amongst the inhabitants of hot countries, for women of distinction and even men also to be fanned by their slaves. Who does not recollect the splendid passage of Shakspeare in Antony and Cleopatra, describing the river pomp of the voluptuous Egyptian?

> The barge she sat in, like a burnished throne
> Burn'd on the water: the poop was beaten gold;
> Purple the sails, and so perfumed, that
> The winds were love-sick with them; the oars were silver,
> Which to the tune of flutes kept stroke, and made
> The water, which they beat, to follow faster,
> As amorous of their strokes. For her own person,
> It beggared all description: she did lie
> In her pavilion (cloth of gold, of tissue,)
> O'erpicturing that Venus, when we see
> The fancy out-work Nature; on each side her
> Stood pretty dimpled boys, like smiling Cupids,
> With diverse-coloured fans, whose wind did seem
> To glow the delicate cheeks which they did cool,
> And what they undid, did.

MUSES. [μοῦσα, Gr.] *In the mythology of sculpture and painting.* There is a rilievo on a sarcophagus in the Capitoline Gallery at Rome, in which the nine Muses are represented; by the help of which and Ausonius's description of them (Idyl 20), it has been attempted to distinguish them from one another, which has always been very difficult. The order of these seems to be quite arbitrary, as appears by the different ranging of them by Herodotus (who has annexed their names to the nine books of his history) and by Ausonius, as well as in all the rilievos now to be met with. In the rilievo abovementioned, they are placed and distinguished in the following manner:—

Clio is first, and distinguished by the roll or book in her hand, or with the longer, bolder pipe (Hor. i. od. 12. v. 2). Her office was to celebrate the actions of departed heroes, though Statius makes her descend to lower functions, from the old notion that

every thing penned in hexameters was an epic poem. Stat. 1. Sylv. 2. v. 10.

Thalia was the muse of comedy and pastorals (Virgil, Eclogue 6. v. 2), and is distinguished by the comic mask in her hand, and her pastoral crook.

Terpsichore has nothing to distinguish her. Ausonius gives her the cithara. On the medals of the Pomponian family, three muses have stringed instruments in their hands, but we do not know them from one another; and are, besides, used to call the cithara, barbiton, and sestudo by the common name of lyres. These three muses are, in the rilievo, the third, or Terpsichore, and the fifth and seventh, which appear to be Erato and Polyhymnia; though that cannot be determined till the names and shapes of the stringed instruments come to be better known.

Euterpe presided over music, and played on two pipes *(tibiæ)* at once, as in the remarks before Terence's plays. By these pipes she is distinguished, though sometimes she holds the fistula, or calami, in her hands, and is so described by Ausonius. Hor. 1. od. 1. v. 33.

Erato, who presided over the amorous kinds of poetry, is neatly attired and looks pretty, though thoughtful. She is represented at times pensive, but in other instances full of gaiety, as she appears on gems; both which characters, though directly opposite, suit with the ever-varying moods of lovers, and, consequently, are proper to their patroness. Ovid invokes Erato pleasantly enough in his Art of Love, and likewise in his Fasti for April, which among the Romans was considered as more peculiarly the lover's month. But Virgil appears to invoke her, in his Æneid, before a field of battle, with less propriety, unless indeed it was because the war was occasioned by a woman.

Calliope is called by Ovid the chief of the muses; and by Horace *Regina*, as skilful on all instruments. The tables in her hand mark her distinguishing character, which was to note down the worthy actions of the living. The books in ancient times somewhat resembled the rolls in the offices for old records; and the form now in use for books was then only used for tablets *(pugillares)* or pocket-books, called by Catullus *pugillaria*, and by Ausonius *pugillar bipatens*.

Polyhymnia is specified by some stringed instrument in her hand, perhaps what the Romans called the barbiton, which we have no name for.

Urania presided over astronomy, and is distinguished by the celestial globe at her feet and the radius in her hand. In statues, the globe is sometimes in her hand, and sometimes placed on a column before her.

Melpomene was the muse of tragedy, and was held, in fact, to preside over melancholy subjects of all kinds. She is distinguished by the mask on her head, which is occasionally placed so far backward that it has been mistaken for a second face, as may be seen in Montfaucon 1. pl. 59.

The palm-tree, the laurel, together with all the fountains of Pindus, Helicon, Parnassus, &c. were sacred to the muses. Sometimes they were depicted as dancing in a chorus, probably to intimate the near and indissoluble connexion existing between the liberal arts and sciences.

Museum. [μοῦσειον, Gr.] *In architecture and the history of the arts.* This term, which means a study, or place of retirement, is, strictly speaking, proper to a part of the palace at Alexandria in Egypt, which part was so denominated in consequence of its being reserved for the muses, and the study of the sciences. In it men of learning, of different kinds, were lodged and entertained; and they were divided into several companies, or colleges, according to the sciences of which they were professors: to each of these establishments was assigned a handsome revenue. The founder of this museum is said to have been Ptolemy Philadelphus, who deposited his extensive library and curiosities therein. The word *museum* has, from this origin, become common to any place set apart for the reception of rare or otherwise valuable things which bear relation to literature, art, science, or natural history.

The museum at Oxford, called the Ashmolean Museum, is a magnificent pile of building; erected at the expense of the University, at the west end of the theatre, on which side it has a noble portico, sustained by pillars of the Corinthian order. The front, which is to the street, extends about sixty feet, and this inscription, in gilt characters, appears over the entrance, Museum Ashmoleanum, Schola Naturalis Historiæ, officina chymica. The edifice was begun in 1679, and completed in 1683, when a valuable collection of curiosities was presented to the university by Elias Ashmole, Esq. and was immediately deposited therein: numerous accessions have been since made, including hieroglyphics, and other Egyptian antiquities, altars, medals, lamps, &c. and a great variety of natural curiosities.

The British Museum, in London, is one of the most superb cabinets of rare and estimable works, both of nature and art, now existing:—a degree of praise to which it is more peculiarly entitled since the acquirement of the Elgin marbles. The present building, although of considerable dimensions, is still not large enough for the purposes to which it is destined; and we are happy to state, that a new edifice is contemplated, wherein suites of apartments will, it is understood, be constructed for the reception of the splendid library lately presented to the public by his most gracious Majesty, as well as for the National Gallery of Paintings, which has been commenced by the purchase of the fine collection of the late Mr. Angerstein, and is now exhibiting in contracted and incommodious apartments in Pall Mall.

In Paris, and sundry other continental cities, have been established very extensive and noble museums. That formerly denominated the *Musée Napoleon* (now the *Louvre*) was, perhaps, rendered altogether the richest in Europe.

It is essential in constructing and arranging a museum, that great care and attention should be paid to system and method. The eye and the mind should be led gradually from one series of objects to another, without any hazard of confusion or of too harsh contrast. Nothing should be huddled together, or found in a mistaken department. It is obvious that to this end a logical head and a practised hand should be employed; a superintendent, indeed, of great natural talent, and not less experience, who would not sacrifice theory to caprice, nor be led into such errors of classification as might probably deceive an unlearned or superficial observer. See ARCHAIOLOGY, CATALOGUE, CLASSIFICATION, &c.

MUSTACHES. [*moustache*, Fr.] *In costume.* This kind of beard or rather whisker on the upper lip does not seem to have ever been in habit among the politer ancients, but savage nations of the same ages were unquestionably accustomed to preserve it, and we know that in the time of Julius Cæsar the Britons shaved the chin, and retained only the mustache. The cut and shape of these accompaniments has of course varied greatly according to the fashion of the times.

We do not find many instances on antiques of figures wearing mustaches. Caylus, in the 6th vol. of his *Recueil* (plate 74, No. 3), has published a bronze coin, upon which we find the casqued head of a barbarian bearing mustaches resembling those now worn among the military. The well-known statue of the Dying Gladiator has also mustaches; and hence Visconti, with other intelligent writers on art have imagined that this fine sculpture has been falsely named, and was most probably meant for a barbarian soldier (probably a Gaul) wounded to death, and that it originally decorated the triumphal monument of a Roman victor.

MUTATION. [*mutatio*, Lat. from μεταβολή, Gr. a change or alteration.] *In all the arts.* The variations in point of taste, ability, or style, which the course of years produces in all the various departments of art.

MUTULE. [*mutulus*, Lat.] *In architecture.* An ornament in the Doric cornice answering to a modillion in the Ionic and Corinthian entablature. See DROPS, GUTTÆ.

MYOLOGY. [*myologie*, Fr.] *In painting, drawing, and sculpture.* The description and doctrine of the muscles. See ANATOMY.

MYROTHECIUM. [Lat.] *In archaiology.* The first volume of the Paintings of Herculaneum, pl. 14, presents a repast in which a young slave bears a small casket to a female seated. The editors of the *Antiquities of Herculaneum* suppose that this casket or little box is intended for the myrothecium or perfume-box, founding their opinion on divers passages of Diogenes Laërtius, Elianus, Athæneus, &c. who each make mention of the usage adopted by the ancients of anointing the head at the conclusion of their meals, in the persuasion that these perfumes possessed the virtue of dissipating, or, at least, of alleviating the influence of the wine.

MYRTLE. [*myrtus*, Lat. from μύρτος, Gr.] *In archaiology.* The name of a shrub or small tree consecrated to Venus. At Athens, both magistrates and supplicants wore myrtle garlands, as did also the victors in the Isthmian games. The Roman triumphs also presented opportunities of assuming the myrtle wreath.

Pliny enters into a good deal of detail respecting this plant, but he does not speak of it as having been much used in sculptures; nor indeed does it appear very well calculated for that purpose. Winckelmann, however, held an opinion somewhat different, and cites instances of antiques in which myrtle branches are introduced.

MYSTERY. [*μυστήριον*, Gr. *mystère*, Fr.] *In all the arts.* Any thing dark, complicated, or unintelligible. In art, this term is applied to such works as are intended to produce an effect striking, solemn, and obscure; such, for instance, as in painting the *Night*, of Corregio; the *Death of St. Bruno*, of Le Sueur; the introduction of

Henry IV. as a simple spectator in the *Coronation of Medicis*, by Rubens, &c. In sculpture, the statue of Memnon is an illustrious instance, if any credit is to be attached to the tradition of musical sounds having issued therefrom at the uprising of the sun, which effect might possibly have been the result of very complicated mechanism. (See MEMNON.) In architecture, we may cite as examples the four celebrated ancient labyrinths (see that word.) The painter who would produce a mysterious effect should take care that his lights be skilfully disposed. A light produced by means half natural, half artificial, would be perhaps best calculated to serve his purpose.

MYTHIC CIRCLE. *In the mythology of art.* This term is applied to any particular series of fabulous adventures or traditions, such, for instance, as those relating especially to the siege of Troy, to the voyages of Ulysses, to the feats of Achilles, or of Hercules, of the family of Agamemnon, &c. An acquaintance with the nature and varieties of these mythic circles is of great use to the artist, in supplying him with subjects, and preserving him from the hazard of anachronism, &c.

MYTHOLOGY. [μῦθος, a fable, and λόγος, a discourse, Gr.] *In archaiology.* A term compounded of the above Greek words, and signifying, in its original import, any kind of fabulous doctrine. As appropriated by us, it refers to those systems of worship adopted among the primitive countries of the world, and, more particularly still, amongst the Greeks and Romans. The following is an enumeration of the imaginary deities of those accomplished nations.

I. The twelve great celestial deities;—Jupiter, Juno, Minerva; Neptune, Venus, Mars, Vulcan, and Vesta; Apollo, Diana, Ceres, and Mercury.

II. The six *heroes*, supposed by the Romans to have been received into the higher heavens; Hercules, Bacchus, Æsculapius, Romulus, Castor, and Pollux.

III. The moral deities who preside over the virtues of men, and the conduct of human life; such as Prudence, Justice, &c.

IV. The constellations, planets, times, and seasons.

V. The beings supposed to inhabit the air.

VI. The deities of the waters. VII. The deities of the earth. VIII. The deities and inhabitants of the lower world.

We have in other parts of this work treated of the most celebrated among these mythological personages, at least in so far as seemed requisite for the purposes of our Dictionary: but have reserved until the present time a description of the manner in which the great supreme god of the ancients, JUPITER, and his coequal bride, JUNO, have been represented on those ancient monuments which have come down to our age.

The distinguishing character of Jupiter's person in all the representations of him, whether by artists or poets, is majesty; and every thing about him carries dignity and authority with it. His look is meant sometimes to strike with terror and sometimes to excite gratitude, but always respect. This would have appeared more strongly, had some of the noble statues of Jupiter, particularly that of Jupiter Olympius, the work of Phidias, remained to our days: since that was reckoned the masterpiece of the greatest statuary that ever lived. The statue of Jupiter in the Verospi palace at Rome, though it is one of the best we have, falls very short even of the idea we can form by the help of the ancient poets. However, it is easily known to be Jupiter, by the dignity of his look, by the fulness of his hair about his face, by his venerable beard, by his sceptre, the mark of command in his left hand, and the fulmen in his right.

Phidias being asked how he could conceive that air of divinity which he had expressed in Jupiter's face, replied, he had copied it from Homer's celebrated description of him. Now all the personal strokes in that description relate to the hair, the eyebrows, and the beard; and indeed to these it is that the best heads of Jupiter owe most of their dignity: for though we have now a mean opinion of beards, yet all over the east a full beard still carries the idea of majesty along with it; and the Grecians had a share of this oriental notion, as may be observed in their busts of Jupiter, and the heads of kings on Greek medals. But the Romans, though they held beards in great esteem even as far down as the sacking of their city by the Gauls, yet in their better ages were apt to undervalue and speak disrespectfully of them. They were then worn only by poor philosophers, and by such as were suffering under disgrace or misfortune.

The fulmen in the hand of Jupiter was a sort of hieroglyphic, having three different meanings, according to the three ways in which it was represented. The first way is a wreath of flame, in a conical shape, like what we call the thunderbolt.

This was adapted to Jupiter when mild and calm, and was held down in his hand. The second way is the same figure with two transverse darts of lightning, and sometimes with wings on each side of it, to denote swiftness. This was given to Jupiter when punishing. The thundering legion among the Romans bore the winged fulmen on their shields, which spread all over them, as appears by the Antonine and Trajan pillars. There is a figure of Jupiter in Buonarotti's collection at Florence, holding up the three-forked bolt as if just ready to dart it at some guilty wretch, but with the conical fulmen lying under his feet, as of no use in cases of severity. The third way is a handful of flames, which Jupiter held up when inflicting some exemplary punishment.

The different characters under which Jupiter was represented among the Romans, were chiefly these:

The JUPITER CAPITOLINUS, who was esteemed the great guardian of the Romans, and who was (according to a very early and strong notion among them) to give them the empire of the world. They called him *Optimus Maximus*, or the best and greatest, which inscription is often found on medals. He was represented (as he appears on a medal of Vitellius) in his chief temple, on the Capitoline Hill, as sitting in a curule chair, with the mildest fulmen held down in his right hand, his character being rather one of goodness than of severity. In his left hand he bears his sceptre as the king or father of all beings. But it was neither his sceptre, nor even his fulmen, *but that air of majesty which the artists strove to express in his countenance*, that chiefly showed the superiority of Jupiter, in all his different characters.

The MILD JUPITER appears (as on a gem at Florence) with a mixture of dignity and ease in his face; that severe kind of majesty given him by Virgil, when receiving Venus with so much parental tenderness, in the first Æneid, v. 256.

The TERRIBLE JUPITER was represented in his statues, in every particular, differently from the *Mild*. These were generally of white marble, as the others were of black. The Mild is sitting with an air of tranquillity; the Terrible is standing, and more or less disturbed: the face of the Mild is serene; of the other angry or cloudy: the hair of the one is composed, in the other so discomposed as to fall half way down the forehead.

The artists took care never to represent Jupiter so angry, but that he still retains his majesty, which too much passion would destroy.

The JUPITER TONANS is represented on medals and gems, as holding up the triple-forked fulmen, and standing in a chariot whirled by four horses. The JUPITER FULMINANS and the JUPITER FULGURATOR appear to be much the same. The FULMINANS may be considered as the dispenser of lightnings which dart from the clouds; and the other of the fulgetra, or lesser lightnings, which shoot along the clouds like the *aurora borealis*.

The JUPITER PLUVIUS, or dispenser of rain, is no where represented except on a medal (where he is seated in the clouds, holding up his right hand, and pouring down a stream of hail and rain from it on the earth, whilst his fulmen is held down in his lap), and on the Trajan and Antonine pillars. On this last, as well as on the medal, he appears with an elderly and sedate look; and extends his arms almost in a straight line each way. The wings given him on the pillar relate to the original and principal character of this god, that of presiding over the air. His hair and beard are all spread down by the rain, which descends in a sheet from him, and falls for the refreshment of the Romans, whilst their enemies are represented as struck with the lightning, and lying dead before them.

There was scarcely any character of Jupiter that was more capable of giving sublime ideas to the artist than this of the Jupiter Pluvius. For though on the medal and Antonine pillar he is all calm and still, on the Trajan he appears much more agitated; and the Roman poets (whose works are counterparts to those of the artists), not only speak of Jupiter as descending in violent showers, but as quite ruffled also with the winds that usually attend them. Silius actually rises into poetry, where he is treating this subject, and one of the finest passages in the Æneid relates to the same. It is where Evander is pointing out the Capitoline hill to Æneas, which Virgil supposes Jupiter to have chosen for his peculiar residence, before his temple, or even Rome, was built.

Besides the figure of Jupiter in his chief temple, there was another, on the outside of it, on the top of the dome, standing in his chariot, and probably with the fulmen in his right, and, according to Silius, the *ægis* in his left hand. This was one of the oldest statues in Rome, and was first made of earth, but afterwards cast in some rich metal.

N

NAIADES. [*ναϊαδες*, Gr. from *νάω*, to flow.] *In the mythology of painting and sculpture.* Certain inferior deities who presided over rivers, springs, walks, and fountains. The Naiades generally inhabited the country, and resorted to the woods or meadows near the stream over which they presided, and hence the derivation of their name. They are represented with long bright hair flowing down their shoulders, and as having a shining humid look, with a fine shape, and well-turned limbs. Their robes (if any, for they are commonly naked) are of a greenish colour, with lighter or darker shades, and so transparent as to show the fineness of their skin and shape. They have sometimes, on the ancient gems, flying veils over their heads, like the Auræ or sylphs.

NAIVE. [Fr.] *In painting, drawing, and sculpture.* A term used to denote the expression of liveliness, frankness, or ingenuousness. The word would be most properly applied, indeed, to such works of art as afford a representation of any action which is the effect of extreme simplicity.

NAME. [nama, Sax. *naem*, Dutch.] *In all the arts.* In ancient times it was common for the artist, whether painter, sculptor, architect, or engraver, to affix the characters of his name to such of his works as he might deem the likeliest to acquire celebrity. These however were not always inscribed in the most unequivocal manner, and a good deal of caution is necessary to be used in deciphering them. Sometimes the name of the artist has been mistaken for that of the figure represented, for instance, and *vice versa.* In other cases, the cupidity of the vender, and the credulity of the purchaser of antiques, have combined to palm off some inferior production as having been executed by one of the great masters of ancient art; and, in addition to these hazards of deception, the purchaser or collector has himself occasionally been instigated by vanity to have his own name impressed on the coin or statue.

In the present day, it is customary for the name of the artist to be affixed at the corner either of a sculpture or engraving, or at the back of a painting.

NARES. [Lat. the nostrils.] *In architecture.* This term is used by Vitruvius to signify the point of issue of a conduit or aqueduct.

NATURAL. [from *natura*, Lat.] *In painting, drawing, and sculpture.* That which offers a true and striking resemblance to reality: close imitation of Nature, as distinguished from the ideal or imaginative, though that species of art should likewise retain the principle of verisimilitude, or proximity to what actually exists.

NATURE. [*natura*, Lat. from *nascor*, *natus*, to be born.] *In the mythology of painting and sculpture.* The goddess Nature appears in a statue with great simplicity; her robes fall down to her feet, for dignity, and to show how much her ways are concealed; and she has a basket of fruits on her head, as the cause of plenty, and the producer of all things. The great Diana of the Ephesians, probably, represented this goddess, as appears from the various symbols on her figure, as the sun, moon, and stars, all sorts of animals, and a number of breasts, to show that she produces and nourishes all things.

NAUMACHIA. [*ναυμαχία*, Gr. from *ναῦς*, a ship, and *μάχη*, a fight.] *In archaiology.* The representation of a sea fight, which was at first made in the *Circus Maximus*, but afterwards elsewhere. Augustus dug a lake for this purpose near the Tiber, and Domitian built a naval theatre.

NAUTILUS. [*ναυτίλος*, from *ναυτίλλω*, to sail, Gr.] *In engraving, sculpture*, &c. The nautilus is a certain shellfish, which swims with its belly upwards, and is furnished by nature with something analogous in appearance to oars and a sail. Those artists who engrave on shells make frequent use of this curious animal. When its cortical substance has been subjected to the action of some acid, and a light friction upon a grindstone, it presents an appearance more brilliantly beautiful than even mother-of-pearl itself.

NAVE. [from *ναὸς*, a temple, or *ναῦς*, a ship, Gr.] *In architecture.* The middle part of a church, distinct from the aisles or wings.

NAVIGATION. [*navigatio*, Lat.] *In emblematical painting and sculpture.* This was figured, among the ancients, by Isis, holding in her hands an expanded sail, as we find her on the Alexandrian medals, standing near a pharos, or light-house. The moderns represent Navigation by a female crowned with poops of vessels, her vestments agitated by the wind. On one side, she leans on a rudder, and on the other

holds a sounding instrument. At the feet of the figure are a naval clock, a compass, the trident of Neptune, and various riches of commerce. In the distance, we perceive ships sailing on the ocean, and a light-house terminates the prospect. The amplification of this method of personifying Navigation is far from the tasteful and noble simplicity of the ancients.

NAXIUM. [*Naxos*, one of the Cyclades, from *νάξαι*, to sacrifice.] A species of hard stone, which, when reduced to powder, was often substituted for powder of diamonds. It was either extracted from, or at all events prepared for use at, Naxos, in the island of Crete, and hence is derived its denomination.

NECESSITY. [*necessitas*, from *nec-esse*, or, as others derive it, from *necto*, to bind or knit.] *In emblematical painting and sculpture.* See PARCÆ.

NECK. [Dutch, hneca, Sax.] *In painting and sculpture.* Among the ancients it was customary for both men and women to leave the neck quite bare, as the inhabitants of Eastern countries do at this day. The females, however, were sometimes adorned with necklaces. In forming this member, regard should always be paid by the painter or sculptor of imaginary personages to the degree of physical force meant to be expressed, and the circumference of the neck proportioned accordingly.

NECKLACE. [*neck* and *lace*.] *In costume.* The Egyptians were early habituated to the use of the necklace, as is proved from the greater number of their ancient statues, even those of men: sometimes these necklaces are found encrusted in silver upon statues of bronze. The Greek and Roman ladies loved to appear thus ornamented, particularly in feasts and dances. The Spaniards wore collars of iron. The Romans designated these articles of dress by two names—*torques* and *collare*. The former appellation included those which the generals were wont to distribute solemnly amongst such soldiers as were distinguished by their valour and good conduct, and who were hence called *milites torquati*. These *torques* were frequently made of gold or of silver. The Gauls wore collars or necklaces of precious metal in their armies. Manlius received his well known surname, *Torquatus*, from having despoiled a Gaul of one of these ornaments whom he had killed in single combat. The *collare* was an instrument of punishment, such as the iron collar of the moderns. It was principally inflicted on the slaves who had eloped from their owners, and were retaken. There are still extant specimens of these collars, bearing an inscription comprising the name of the slave's master, his residence, and a request to those finding the unfortunate man, to restore him to *the proper owner*.

To return to the ornamental collar or *necklace*, many of the most ancient monuments, such as Greek vases, &c. present it as encircling the neck of some divinity. Venus, Ariadne, and even Minerva, may be cited as instances. This necklace is most commonly composed of round berries, or beads, strung together; occasionally of acorns. There are several antique Roman necklaces still preserved; they are constructed similarly to ours—namely, of an assemblage of small pieces of different substances, attached by rings. Caylus, in his *Recueil*, Guattani, in his *Monumenti Inediti*, Roccheggiani and Willemin, in their several works on costume, have published specimens of ancient necklaces or collars.

NEGLIGENCE. [*negligentia*, Lat.] *In all the arts.* Carelessness and inattention to admitted rules, to propriety of costume, correctness of story, natural disposition of light and shade, &c. This is more or less blamable in proportion as the thing overlooked is of little or great consequence, or is, in its nature, of an obvious or of a *recherchée* kind.

NEPTUNE. [from *νίπτω*, to bathe.] *In mythological painting and sculpture.* Neptune, on a common medal of Adrian, is standing, as he was generally represented, with his trident in his right hand. This was his peculiar sceptre, and seems to be used by him chiefly to rouse up the waves; but he sometimes laid it aside, when he was to appease them, though he resumed it on occasion. He holds a dolphin in his left hand, and rests one of his feet on part of a ship, to indicate that he presides over the inland seas, more particularly the Mediterranean, which was the great and almost only scene for navigation among the Greeks and Romans. His aspect is majestic and serene (as it is in all his good figures), and he is so described by Virgil, even when represented as in a passion. The poets have generally delighted in describing Neptune as passing over the calm surface of the waters in his chariot, drawn by six horses, with a Triton sometimes on each side, as guiding those that draw the chariot.

NESSOTROPHIUM. [Lat. *νεποτροφεῖον*, Gr. from *νῆττα*, a duck, and *τροφεύς*, a feeder or nourisher.] *In the archaiology of architecture.* A place in the Roman towns con-

structed for the purpose of breeding and fattening ducks.

New. [newyd, Welsh, neow, Sax. *neuf*, Fr.] *In all the arts.* The introduction of any branch, style, or manner of art not known before. In aiming at novelty (an aim highly praiseworthy and creditable to every artist), it is necessary, at the same time, that extravagance and bad taste be avoided, and these are errors which a young aspirant after fame would not improbably fall into. It is not sufficient that a thing be merely novel, unless it combines with that quality the still higher one of excellence. See Composition, Invention, &c.

Niccolo. [Italian.] *In gem sculpture.* A species of Arabian sardonyx, the upper stratum of which is of a white hue inclining to bluish—a quality called by the Italians *niccolo col velo turchino;* that is to say, an onyx with a bluish vein.

Niche. [*niche*, Fr.] *In architecture.* A cavity or hollow in a wall, for the reception of busts, statues, &c. These niches are found most abundantly in Gothic buildings, as witness any of the cathedral churches of our own country.

Niello. [Italian.] A species of work used amongst the Romans and modern Italians, somewhat resembling damask-work, and performed by enchasing a mixture of silver and lead into cavities and holes cut in all sorts of hard wood and metals. This art was denominated by the ancients *ingellum*, and was used by them to decorate a great variety of things, and more especially candelabras. Several drawings exhibiting specimens of this description are given by the editors of the *Antiquities of Herculaneum.*

Night. [nihт, Sax. *nauts*, Gothic.] Night, or, according to the Greeks, Νύξ, and the Romans, *Nox*, was one of the most primeval among the deities of the heathens. She had a famous statue in the temple of Diana at Ephesus. She was held to be mother of the Parcæ, or Destinies, of the Hesperides, of Dreams, Discord, Death, &c. She is commonly represented as mounted on a chariot, and covered with a veil bespangled with stars. Occasionally two children are depicted held under her arms:—the one black, representing the principle of death—the other white, to indicate the innocence and refreshing nature of sleep. Some of the modern artists have depicted her as a woman veiled in mourning habiliments, crowned with poppies, and borne on a chariot drawn by bats and owls.

Nile. [*Nilus*, Lat. Νεῖλος, Gr.] *In emblematical sculpture.* The Nile, anciently called Ægyptus, is one of the noblest rivers in the known world. The ancients were ignorant of its sources, nor have the moderns been enabled to solve the difficulty. From this cause, an impossibility is often implied by the proverb *Nili caput quærere*—"to seek the river-head of the Nile." This magnificent stream flows through the middle of Egypt in a northern direction, and on coming to the town of Cercasorum, it divides itself into several branches, and falls into the Mediterranean by seven mouths.

The Nile has been personified in several statues, but most particularly in a very noble one of black marble now in the Vatican. He is distinguished by his large cornucopia, by the sphinx couched under him, and by the sixteen little children playing around him. The cornucopia is introduced with the greatest propriety, this river being the absolute cause of the great fertility of Lower Egypt, which it supplies both with soil and moisture. He was their Jupiter Pluvius, or chief river god, and thence termed by Tibullus the Egyptian Jupiter. The sphynx alludes either to the celebrated statue on the plain of Memphis, or to the mystic knowledge so much cultivated in Egypt. By the sixteen children are understood the several risings of the river every year, as far as to sixteen cubits (Pliny, l. xxxvi. c. 7). This piece of statuary is said to be of black marble, in allusion to the Nile's coming from Ethiopia. It is worthy of remark, that Virgil, in his account of Æneas's shield, describes the Nile as of a vast size, with a mixture in his countenance of terror and concern, spreading his robe, and inviting the defeated fleet of Cleopatra to the inmost recesses of his stream. In the Vatican statue the water flows down from under his robe, which conceals his urn, to denote that the head of this river was impenetrable. In some modern statues the head of the figure is quite hidden under his robe for the same reason.

An instrument, called a *nilometer*, was constructed by the ancient Egyptians, consisting of a rod or pillar, marked with the necessary divisions, for the purpose of ascertaining the proportionate increases of the flood of the Nile.

Nimbus. [Lat.] *In archaiology.* A circle or disk, of a luminous nature, which, on sundry ancient medals and other monuments, environs the heads of divinities or sovereigns: the primitive Christian artists adopted this usage, and applied it to their personifications of the great Founder of their religion, and also to the saints and martyrs of the holy church. There can

be little doubt but that the origin of this custom arose from a desire on the part of the people of remote antiquity to compliment their kings and heroes by decorating them with a resemblance to the rays of the sun, the great apparent source of life, heat, and fertility.

NIOBE. *In mythological painting and sculpture.* The daughter of Tantalus, sister of Pelops and wife of Amphion, king of Thebes. She had six, or according to other accounts seven sons, and as many daughters. Niobe comparing herself, in her pride of heart, with Latona, that goddess became so incensed, that she desired her two children, Apollo and Diana, to avenge the affront. They, granting her request, slay all Niobe's children. Ovid is very diffuse in his description of this retributive vengeance. He represents Apollo and Diana, with their bows, executing the deed, and even tells us how and where each son was wounded.

There was, according to Propertius, a fine rilievo on one of the folding doors to the temple of Apollo Palatinus, and another is spoken of by Pliny in his Natural History—both on this subject. There is likewise a noble collection of detached figures in the Medicean gardens, representing Niobe and her children about the beginning of the action. Among the sons there is a figure, which has been supposed to be meant for Amphion, being too old for one of his sons. The attitude agrees with Juvenal's description of this prince (Sat. vi. v. 193), whom he imagines to have been present. Besides this select set (which were dug up near the *Porta di San. Giovanni*, and purchased by the Grand Duke of Florence) there are single figures of Niobe's sons in several collections at Rome.

In the celebrated Medicean statue, Niobe appears in an ecstasy of grief for the loss of her offspring, and about to be converted into stone herself. She seems as if deprived of all sensation by the excess of sorrow, and incapable either of shedding tears or of uttering lamentations. With her right hand she clasps one of her little daughters, who throws herself into her parent's bosom; which attitude equally expresses the ardent affection of the mother and the natural confidence of the child. The whole is executed in a surprisingly beautiful manner, as are the statues of the other children. We have no direct information at what period this noble group was transported from Greece to Rome, nor as to when it was first erected. Flaminius Vacca only says, that these statues were (as we before observed) found in his time not far from the gate of St. John, and purchased by the Grand Duke Ferdinand.

Dr. Moore, speaking of the statue of Niobe, says, "The author of Niobe has had the judgment not to exhibit all the distress which he might have placed in her countenance. This consummate artist was afraid of disturbing her features too much, knowing full well that the point when he was to expect most sympathy was then, when distress cooperated with beauty, and when our pity met our love. Had he sought it one step farther in *expression*, he had lost it."

In the following epigram this statue is ascribed to Praxiteles. The original is in Greek, by an unknown author, and is to be found in the fourth book of the Anthologia.

> While for my children's fate I vainly mourn'd,
> The angry gods to massive stone me turn'd;
> Praxiteles a nobler feat has done,
> He made me live again from being stone.

NISMES. *In the history of the arts.* A flourishing city of France, in the department of Gard, and late province of Languedoc, with a bishop's see. In this town are to be found the remains of several monuments of the splendour of the Romans. The amphitheatre is still in a state of good preservation, and affords an imposing *coup-d'œil.* The MAISON CARRÉE (see that word) is another magnificent instance: and to these are to be added the remains of a bath and of a nympheum, together with several musaics, and a variety of inscriptions. At a short distance from Nismes is also a magnificent aqueduct consisting of three arcades one above another, known by the appellation of the *Pont du Gard*, by reason of the lower arcade having served, and indeed serving still, for a bridge over the Gardon.

NOBILE. [Fr. *nobilis*, Lat.] *In all the arts.* See GRAND.

NODUS. [Lat.] *In ancient sculpture and costume.* This was one of the terms by which the Romans expressed that peculiar kind of head-dress called by the Greeks κορύμβιον. (See CORYMBIUM.) Sometimes the pin which served to retain this kind of head-dress in shape was hollow, and has even been known to be used for the purpose of containing poison. It was from a receptacle of this nature, according to Dio Cassius, that Cleopatra drew the pernicious drug by which she destroyed her life. It is without doubt that this voluptuous and ill-fated woman did commit violence on her own person, but by what particular instrument is subject to great uncertainty and dispute.

NOSE. [nœse, nosa, Sax.] *In painting, sculpture, drawing*, &c. That prominence on the face, which is the organ of scent and the emunctory of the brain.

The ancients seem to have had a considerable aversion to small noses, and the Romans esteemed above all the aquiline nose, which Pliny termed, by way of distinction, *royal*. It is thus that Ælianus has described that of Aspasia, and Philostratus those of Achilles and of Paris. According to Plutarch, Cyrus had the same, and on this account the Persians are said to have admired noses of this shape. But these aquiline noses were only reckoned beautiful insofar as the curve was gentle and almost insensible, in contradistinction to such as are decidedly crooked, resembling the nose of a parrot, which amounts to a deformity. The Grecians, indeed, generally speaking, seem to have held a straight line from the forehead or rather slightly inclined to be the *beau idéal* with respect to this feature, and accordingly we find it so practised in their best statues, &c. They however participated greatly in the dislike to small and unimportant noses, and probably one cause for this is to be found in the fact of their making the expression of indignation and anger lie greatly in the nose and nostrils. It may be remarked, in confirmation of the above observations, that the short nose is never to be found in Roman sculptures earlier than the times of Caracalla, when the art evidently declined, as is obvious, among other proofs, from the introduction of so bad a taste as working in variegated marbles. See NOSTRILS.

NOSTRILS. [nœse and thyrl, a hole, Sax.] *In sculpture, painting*, &c. In the figures of the divinities, the idea of repose and tranquillity which answers so perfectly to our notions of supreme serenity and benevolence is generally found strongly marked, and is seldom altogether contradicted. If however, impelled by circumstances, they thought it necessary to disturb this expression by introducing that of agitation or of anger, they usually confined the latter to some particular feature. Thus a large nose with expanded nostrils became indicative of the displeasure of the deity represented. The Greek authors speak, in these cases, of wide nostrils which inspire the air freely; and sacred writers have also used the same image in treating of the displeasure of JEHOVAH. With regard to art, an eminent instance is found in the swollen and enlarged nostrils of the noble statue of the Apollo Belvidere. See NOSE.

NOURISHED. [from the verb *to nourish*.] *In painting*. This is a term sometimes applied, in the way of commendation, to a judicious mixture of colours. Its usage amongst the French (*nourri*) is however far commoner than on this side the channel.

NUDITY. [*nudus*, Lat. naked.] *In painting and sculpture*. The gods, demigods, and heroes of antiquity are generally represented either entirely naked, or with a slight mantle only thrown across the shoulders. Figures of fauns, satyrs, &c. also have this distinction. An exception must, however, be made with respect to Jupiter, who is very seldom found without an ample robe enveloping different parts of his body. Perhaps the reverence entertained by the ancients for this their principal deity, prevented them from exhibiting him in a state of absolute nudity.

NUMISMATICS. [νόμισμα, Gr. money, coin.] *In archaiology*. A term used to express the description and knowledge of ancient coins and medals, whether of gold, silver, brass, &c. See MEDALS.

NYMPHÆUM. [Lat. from νυμφαῖον, Gr.] *In archaiology*. This term was applied by the ancients to a species of GROTTOES (see that word) which were found very frequently in mountainous and rocky countries, and which, surrounded often by trees and shrubs, presented a beautiful and picturesque appearance. The Romans were fond of constructing these kind of grottoes in the gardens attached to their villas, at least wherever the situation would permit. One of the most celebrated among ancient nymphææ, or grottoes, was that dedicated to the nymph Corycia, upon Mount Parnassus, which enclosed a spring of unusual size and clearness. This famous grotto was very extensive, and yet admitted so much light from the external air, that its whole space might be traversed without the aid of lamps or torches. In the middle of a wood, near to Lebadia, in Bœotia, was the grotto of Trophonius, celebrated for its oracle. In Attica may still be seen the remains of a nymphæum adorned with many inscriptions and bassi-rilievi, from the rude workmanship of which it may be presumed that the grotto is exceedingly ancient.

These places were each of them dedicated either to some nymph, who was supposed to preside over the spring which often shot up withinside them, or to one of the gods themselves. They were in some instances situated at the foot of a mountain; in others half way up, and approached by serpentining paths frequently obscured by the overhanging foliage. By the side of these paths, the rills which had

their source in the grottoes above might, here and there, be seen trickling down their narrow beds into the valley below. We must not omit, in conclusion, to allude to the far-famed grotto of Calypso, of which so fine a description has been given by Homer in the Odyssey.

Nymphs. [νύμφη, Gr.] *In the mythology of painting and sculpture.* Certain female deities among the ancients. They were most commonly separated into classes, nymphs of the land and nymphs of the sea. Of the former class, some presided over woods, and were termed Dryads and Hamadryads; others presided over mountains, and received the name of Oreads; others again over hills and dales, being denominated Napææ. Of the sea nymphs, there was an equally great variety: such as, Naiades (which word see), Nereids, Oceanides, &c. They were all worshiped by the ancients, though not with so much solemnity as the superior deities. They were usually depicted as young and beautiful virgins, veiled up to their middle, and sometimes they held a vase, from which they seemed to pour water. Occasionally, however, by way of substitution for these vases, they held grass, leaves, or shells.

The nymphs were generally specified by an epithet denoting the place of their residence; and thus the nymphs of Sicily were termed *Sicelides*, those of Corycus, *Corycides*, &c.

O

O du Giotto. *In the history of art.* Pope Benedict IX. having entertained the purpose of adding to the embellishments of St. Peter's, sent a messenger to Florence and other places, to consult the principal artists then living on the subject. Among these was Signor Giotto, who being applied to in like manner as the rest, took up a piece of paper, and traced thereon, without the aid of compasses, or indeed any other instrument except a pencil, a circle of the most regular, nay even of the most perfect description. Having done this, he, with a smile, gave the paper to the gentleman who had waited on him, whom he requested to present it to the Pope as his design. The gentleman expressed some incredulity as to the painter's intention, which however becoming after awhile evident, he returned to his holiness, and offered Giotto's *design* with the rest. The Pope, alike struck with the extraordinary delicacy and truth of the performance, and with the singularity of the transaction, made choice of Giotto, in preference to all the other candidates, to superintend the projected improvements.

This story evidently forms a counterpart to that of the lines of Apelles and Protogenes, and both appear to us to have received an infinite deal too much notoriety and admiration. All that is proved by them is that the several artists possessed strong nerves and steady fingers. The latter must undoubtedly be considered as of great utility and advantage to a painter or sculptor, but it is rather too much to found thereon a high notion of his talents, and still more absurd to make such a distinction the basis of a preference over other men who, with less ready *slight of hand*, might probably possess far superior ability.

Oak. [ac, æc, Sax.] *In archaiology.* The ancients had a considerable veneration for this tree by reason of its utility in the arts of construction and various other ways. It was particularly consecrated to Jupiter. Among the Romans, an oaken crown was awarded to such as had saved the life of a citizen. Before the Capitoline games, the curule ædiles offered to Jupiter, in his temple, a garland of the leaves of this tree.

The editors of Winckelmann's History of Art, published at Milan, name the oak among those trees the wood of which was used in sculpture. Their opinion is probable, but it seems to be destitute of the necessary proof. However, as the oak is excessively well adapted to this purpose, and has been much used therein by the moderns (more particularly for carved work in the interior of cathedrals), we may readily imagine that its use in this respect was not unknown in former times.

Obelisk. [*obeliscus*, Lat.] *In architecture.* These structures are the simplest among all the forms of ancient Ægyptian and Phœnician architecture. We are ignorant of the actual period at which they were originated, since no ancient historian has made much mention of them, but it is most likely that they were erected in ages absolutely primeval. They may be defined as a quadrangular pyramid truncated and of slender proportions, and are frequently charged with inscriptions or

hieroglyphics. It has been conjectured with some ingenuity that the first purpose for which these pillars were raised was to transmit to posterity precepts of philosophy, which were cut in hieroglyphical characters: afterwards, they were used as monuments to immortalize the great actions of heroes, or the memory of persons beloved. The first obelisk directly referred to in history was that of Ramases, said to have been a king of Egypt in the time of the Trojan war, and which was forty cubits high. Phius, another king of Egypt, raised one of fifty-five cubits, and Ptolemy Philadelphus another of eighty-eight cubits, in memory of Arsinoë. These obelisks were entitled by the Egyptian priests the *fingers of the sun*, because they were in the habit of making them serve also as styles or gnomons to mark the hours on the dial. The Arabs still call them *Pharaoh's needles;* whence the Italians have designated them *aguglia*, and the French *aiguilles*.

But of all the situations in which obelisks were generally erected, one of the most common and frequent was the space before a temple. Diodorus makes mention of two obelisks of Sesostris placed before a Theban temple, which were one hundred and twenty cubits high. Herodotus mentions two others, of a hundred cubits high, one of which was erected before a temple at Sais, and the other before the temple of the Sun at Heliopolis. Pliny, of the few ancient authors, however, who have treated of the subject, goes most into detail on this species of monument. The remains of many very antique examples have been discovered by modern travellers; some eminent for their magnitude and beauty. Norden, a Danish writer, speaks of having seen several that had been ornamented with coloured hieroglyphics. Some have been found without hieroglyphics, but these are most probably referable to later times.

The Romans, in the plenitude of their power and splendour, removed many of these relics of times, then ancient, from their original situations, and transported them to Italy. On the overrunning of that majestical empire by the barbarians, most of these interesting pillars were thrown down, defaced, or demolished. The exhumations made under the decree of Pope Sextus V. brought to light four of them, which were repaired as well as possible by the attention of his architect, Fontana. Since that period, several others have been dug up. Several obelisks have likewise been preserved at Constantinople, the most celebrated of which was in that part of the hippodrome denominated *Media Spina*. On the four sides of the base of this noble monument were sculptured a variety of subjects: the bassi-rilievi of the northern side have been published by Spon. Besides this, another fine one exists there, made, like most of the others, of granite. At Catana, in Sicily, fragments have been discovered of two Egyptian obelisks, doubtless conveyed thither by the Romans. One has been set up again, presenting a curious appearance from its having eight fronts or faces. Figures were frequently placed at the point of the loftiest obelisks.

The famous obelisks denominated *the devil's arrows*, now reduced to three (the fourth having been taken down in the last century), stand about half a mile from the town of Boroughbridge, to the south-west, in three fields, separated by a lane, and two hundred feet asunder, on high ground sloping every way. Mr. Drake urges many arguments to prove their Roman antiquity, and plainly proves them to be natural, and brought either from Plumpton quarries (about five miles off) or from Ickly (sixteen miles off). The cross in the town (twelve feet high) is of the same kind of stone. The easternmost, or highest, is twenty-two feet and a half high, by four feet broad, and four feet and a half in girth. This stands alone, and leans to the south. Stukely and Plot affirm these to be British monuments originally hewn square. The flutings are cut in the stone, but not through. Dr. Gale supposed them to have belonged to that species of terminal figures called HERMES (see that word), and to have lost their heads and inscriptions: in a MS. note in his Antoninus, however, that learned gentleman confesses himself to have been mistaken in this opinion, there being no cavity whatever to receive a bust.

On the north side of Penrith, in the churchyard, are two square obelisks of a single stone each, eleven or twelve feet high, one about twelve inches diameter, and twelve by eight at the sides, the highest about eighteen inches diameter, with something like a transverse piece to each, and mortised into a round base. They are fourteen feet asunder, and between them is a grave enclosed between four semicircular stones of the unequal lengths of five, six, four and a half, and two feet high, having on the outsides rude carving and the tops notched. This is called the Giant's grave, and ascribed to Sir Ewan Cæsarius,

who is said to have been as tall as one of the columns, and capable of stretching his arms from one to the other.

Many very learned and interesting works have been put forth on the subject of obelisks, the most important of which we will proceed to cite:—

Mic. Mercati, *Degli Obelischi di Roma*, 1589, 4to. Petri Angelii Bargarei, *Commentarius de Obeliscis*, 4to. Rome, 1586:—This dissertation will be found in Grævius *Thesaur. Antiquitatum Romanor.* fourth vol. p. 1893, and following.—Domen. Fontana, *Della Trasportatione dell' Obelisco Vaticano et delle fabriche di nostro Sign. Papa Sisto 5*, first book, Rome, 1590, folio, with figures. An article entitled *Des Obélisques*, by M. Pouchard, in the *History of the Academy of Inscriptions*, first vol. p. 193-8. An interesting abstract of this excellent work will be found in the *Gentleman's Magazine* for June, 1748. Angeli Mar. Bandinii, *De Obelisco Cæsaris Augusti, e Campi Martii ruderibus nuper eruto Commentarius*, with an Italian translation, &c. Rome, 1750, folio, with plates. *Question Historique sur le Sujet d'un ancien Obélisque.* (V. *Continuation des Mémoirs de Littérature* de Sallengre, eleventh vol. p. 473-8.) *Observations de* Gibert *sur l'Obélisque interprété par* Hermapion, in the *Mémoires de l'Acad. des Inscriptions*, thirty-fifth vol. p. 665-76.—*De Origine et usu Obeliscorum ad Pium Sextum, pontific. max.* by Georgio Zoega, Rome, 1797, folio. This admirable work (one of the very best to which we can recommend the reader for information on the present subject) is ornamented with many engravings executed uncommonly well.

The following are among the most interesting books of voyages and travels, which bear on the subject of obelisks. Benjamin Tudelensis, *Itinerarium, hebraice, cum Latina versione* Constantini Imp. Lugd. 1633, 12mo. Petrus Martyr de Angleria, *Legatio Babylonica*, Basil. 1533. The *Navigationi e Viaggi*, collected by Ramusius, in Venice, 1563. Prosperi Alpini, *Itali, Rerum Ægyptiacarum*, fourth book, Lugd. Batavor. 1735. *Luys del* Marmol Carvasal, *Descripcion general de Africa*, Malaga, 1599. Manuel D'Almeyda, *Historia general de Ethiopia a Alta, composta na mesma Ethiopia; abbreviada pelo* P. Tellez, em Coimbra, 1660. *Relation d'un Voyage en Ethiopie*, 1700. Franc. Gemello Carreri, *Giro del Mondo*, Venice, 1719. *L' Etat présent de L'Egypte*, par Dominique Jauna, Leyden, 1747. *Voyages in Europe, in Asia, and Egypt*, translated from the Dutch of Van Egmont and J. Heyman, London, 1759. *Relation d'un Voyage fait en Egypte*, par Granger, Paris, 1745. The different Voyages of Paul Lucas, Paris, 1704 and 1712, and Rouen, 1724, 12mo. *Lettres édifiantes et curieuses*, Paris, 1704. *Nouveaux Mémoires des Missionnaires Jésuits dans le Levant*, vols. ii. v. and vii. Paris, 1718, 1725, 1729. *Voyage d'Egypt et de Nubie*, par Frederic Louis Norden, edited at Paris by L. Langlès, 1795, 4to. *Lettres sur L'Egypte*, par M. Savary, Paris, 1785, 8vo. *Voyage en Syrie et en Egypte*, par. M. Volney, Paris, 1787, 8vo.

Object. [*objectum*, Lat. *objet*, Fr.] *In all the arts.* In general any thing which attracts and fixes our regard. The word is also applied to signify the end or purpose which a man proposes to himself in any given pursuit. The object of the fine arts, to speak in an enlarged sense, is to answer the ends of utility and of mental accomplishment in the most graceful and agreeable manner.

Obryzum. [Lat. from ὄβρυζος, Gr.] *In archaiology.* According to a passage in Pliny, this name was appropriated by the ancients to a species of gold which had been several times purified with fire. In fact, *aurum obryzum* meant the very purest of all gold.

Obscure. [*obscurus*, Lat.] See Chiaro-Scuro.

Obscurity. [*obscuritas*, Lat.] *In emblematical painting.* Certain modern artists have personified obscurity by a figure wrapped in a long black veil. She extends over her head another thick veil, or canopy, by means of which the rays of the sun are hindered from penetrating to the spot on which she stands. An owl is perched upon the head of the figure, and other nocturnal birds fly around her.

Observatory. [from the Latin verb *observo*, to watch.] *In architecture.* A building erected upon an elevated spot of ground, such, for instance, as that in Greenwich Park, and sometimes surmounted by a terrace, from which to make astronomical and physical observations and experiments.

The *Paris Observatory* is one of the finest in Europe, and was constructed from the drawings of M. Claude Perrault, between the years 1667 and 1672. This edifice is vaulted throughout, and neither iron nor wood form any portion of its materials. It is eighty feet high, with a fine terrace at top.

The *Greenwich Observatory* was erected in 1676, by order of Charles II. at the

solicitation of Sir Jonas Moore and Sir Christopher Wren; and furnished with the most accurate instruments, particularly a noble sextant of seven feet radius, with telescope sights.

Tycho Brahe's Observatory, which was in the little Island Ween, or Scarlet Island (between the coasts of Schonen and Zealand in the Baltic), was built and furnished with instruments at his own expense, and called by him Uraniburg. Here he spent twenty years in observing the stars, and the result is his catalogue.

Pekin Observatory. Father Le Compte describes a very magnificent observatory, erected and furnished by the Emperor of China, in his capital at the intercession of some Jesuit missionaries, principally Father Verbeist, whom he made his chief observer. The instruments are exceedingly large; but the division less accurate, and the contrivance in some respects less commodious, than that of the Europeans.

Observatories, as they are very useful, and indeed absolutely necessary for astronomers, so they have become far more common than they were. There is a very excellent one now at Oxford, built by the trustees of Dr. Radcliffe, after the designs of James Wyatt, at the expense of nearly £30,000. At Cambridge there was, a few years ago, over the great gate of Trinity College, one which was called *Sir Isaac Newton's*, because that great philosopher had used it; but it is gone to decay. It had been well had the University kept it in repair, in memory of that illustrious man. In St. John's too, there is a small one; but a handsome building has been erected within the two last years, at an expense of nearly £60,000, which we believe is not yet quite completed. The late ingenious Mr. Cotes had used to give lectures in Sir Isaac Newton's on experimental philosophy. There are several very good observatories in the Scotch Universities, and an excellent one has been erected, not many years ago, at Dublin.

Obsidian. [*obsidianus*, Lat.] *In architecture, statuary, and engraving*. This name has been given, in various eras, to several different substances. The *obsidianum lapis* of the ancients was a stone of a synonymous kind to that which in other places they termed *Chian marble*. It was represented as being very smooth and hard, but, from the latter quality, extremely difficult to cut; as being susceptible of a particularly high polish, and employed among the nations of ancient Greece, for the purpose of constructing reflecting mirrors, &c.

Caylus, however, and many other modern writers, question the fact of the real obsidian having ever meant a marble at all, and describe it as a species of factitious stone, or composition. Caylus, indeed, has given a treatise on this subject, which will be found in the thirty-first vol. of the *Mémoires de l'Académie*.

On the other hand, the mineralogists attach the designation of obsidian to a kind of lava, which presents all the appearance of glass, from which substance it is even difficult to distinguish it. They represent it as being black in colour, or of a sort of bottle-green; as smooth in surface, hard, and striking fire with steel. It is commonly to be met with in the neighbourhood of volcanoes, and in some basalts, which are probably the products of volcanic fires now extinguished. According to Spalanzani, the mountain de la Castagna, in the volcanic island of Lipari, is altogether formed of this volcanic glass, or obsidian, which would appear to have flowed in successive currents, similarly to streams of water falling in a rapid descent, and then to have suddenly frozen. This glass is, in some instances, found to be substantial and compact, in others porous and spongy. Obsidian, therefore, may, according to this definition, be denominated lava suddenly cooled:—if a mass of lava or basalt be exposed to the heat of a glass furnace, it melts into a shining black or greenish black glass. Several large strata of obsidian, it is reported, intersect the cone of Vesuvius, serving as a cement to keep together the loose materials of which it is composed.

Instances are not rare of the use of obsidian in art. Under its first definition (namely Chian marble) and second also, it has been frequently adapted to the uses of the statuary and architect, and considered in the point of view in which we last described it (namely as volcanic glass) it is often ground and polished, and submitted to the operation of the graver.

Obsidional Crown. [*obsidonalis*, from the Latin verb *obsideo*, constructed of *ob*, before or about, and *sedeo*, to sit down; and the English word *crown*.] *In archaiology*. This species of crown, or garland, was accustomed to be presented by a town, citadel, or army which had been blocked up, to the chief or general who had delivered them by raising the siege. It was habitual to frame it, if possible, of the blades of those herbs which were indigenous to the town relieved.

Obsidional Money. [similar derivation.] *In numismatics*. Such are denominated those several coins struck in a besieged

town, to supply the defect or scarcity of other species of current money. De Boze has produced a treatise on this subject, of which we find a short abstract in the *Mémoires de l'Académie des Inscriptions*, and from this abstract, we have drawn the following particulars.

The usage of coining money for the immediate use of a blockaded town is very ancient, and the medals thus struck generally bear in their fabrication and material evidences of the calamitous and bereaved condition which gave rise to their existence. They are mostly of bad metal, and rudely formed, an observation to which some exceptions of course occur, but they are not numerous. The shape of these coins or medals varies:—sometimes they are round, sometimes oval, sometimes square; occasionally, even, octagon or triangular, &c. The type and inscriptions vary equally. Some are engraved on both sides, which however is rare; by far the greater part having no reverse. The arms of the besieged city are often found on them, sometimes those of the sovereign, or governor; but it is most common to see the *name* of the town only (either entire or abridged), with the date and value. The earliest specimens of this kind of money at present known are those struck at the commencement of the sixteenth century, in Italy, at the sieges of Pavia and Cremona, under Francis I. In 1529, a mint of this description was formed at Vienna, then besieged by Soliman II. The first wars between Spain and Holland produced a considerable quantity of obsidional coins. It is scarcely necessary to add, that these coins had only an ephemeral and local value, not passing into perpetual or general currency, but being in fact a sort of token or obligation contracted by the governor or magistrate of a blockaded place, to meet the exigencies of the particular time.

For further information on the subject of obsidional money, the reader is referred to Klotzius, *De Numis necessitate urgente cusis*, in his *Opuscula Numaria*, Hall. 1772, 8vo.; and to Tobiesen Duby, *Recueil général des Pièces Obsidionales et de nécessité*, Paris, 1786, folio. This latter work, published by M. Ennery after the death of the author, was compiled on the collection of obsidional coins in the possession of M. de Boulogne, and which afterwards passed into the cabinet of the then Imperial Library.

Obstinacy. [*obstinatio*, Lat.] *In emblematical painting and sculpture.* According to several iconologists, the emblem of this moral defect is a figure embellished with the ears of an ass, and who holds her hands before her eyes, to shut out the light of day. Her most ordinary accompaniment is a mule, upon which she leans or sits. In other instances, she is seen to hold by the bridle a restive ass.

Obverse. [*obversus*, Lat. towards.] *In numismatics.* That side of a coin or medal which bears the head of the chief or sovereign by whose direction it was struck. See Medals.

Occasion. [*occasio*, Lat. from καιρὸς, Gr.] *In emblematical painting and sculpture.* By the account of Himerius and Callistratus, cited by Winckelmann, Lysippus represented Occasion under the figure of an adolescent, with wings to his feet, which rested upon a globe; in the left hand he held a bridle, and his temples were shaded with long hair, whilst the back part of his head was bald. A noble statue of Occasion was sculptured by the illustrious Grecian artist, Phidias, in the shape of a female resting upon a wheel, having wings at her feet, a tuft of hair hanging over her face, and shaven close behind.

Occidental. [*occidentalis*, Lat.] *In the history of art.* The western quarter of the globe, or horizon, or that point of the latter where the ecliptic, or the sun therein descends into the lower hemisphere: in contradistinction to *Orient.* Hence we use the word *occidental* for any thing belonging to the west, as, for instance, occidental pearls, &c.

In gem sculpture, the term occidental has been applied to those stones which reach only an inferior degree of beauty and excellence: the hardest, finest, and most brilliant of the precious stones, with but few exceptions, are the produce of Eastern countries, and hence the relative terms *oriental* and *occidental* have acquired general use, and designate, among lapidaries, not so much the particular part of the globe from which the gem was extracted, as its greater or less degree of splendour, brightness, and susceptibility.

Ocean. [*oceanus*, Lat. from ὠκεανός, Gr.] *In painting.* That gigantic body of salt waters encompassing every portion of the terrestrial globe, and by means of which, in the degree of perfection to which navigation has attained, the different nations of the earth are enabled to communicate and interchange commodities with each other. The ocean is separated into three great divisions, which it is necessary the artist should be acquainted with, particularly the painter whose inclination leads him towards the choice of marine subjects.

The *Atlantic* Ocean, which divides Europe and Africa from America, and which is, generally speaking, about three thousand miles wide. 2. The *Pacific* Ocean, or South Sea, which divides America from Asia, and is in most parts ten thousand miles across. 3. The *Indian* Ocean, separating the East Indies from Africa; this is three thousand miles over. The other seas are only parts or branches of these, and commonly are designated from those countries upon which they border.

Oceanus. [Lat.] *In the mythology of painting and sculpture.* A powerful deity of the sea, son of Cœlus and Terra. He is fabled to have married Tethys, and their offspring are the most celebrated of the rivers, such as the Peneus, Strymon, Alpheus, &c. with a number of daughters who are called from him Oceanides. Oceanus is usually represented as a very aged man, with a venerable flowing beard, and riding upon the waves of the sea. Sometimes he holds in his hand a pike, while a sea-monster stands near him, and in the distance ships are seen under sail. The ancients paid great devotion to this deity, to whose especial care they intrusted themselves, when about to set forth on any voyage.

Ochre. [ὤχρα, Gr.] *In painting.* A genus of earths, slightly coherent, and composed of fine, soft, smooth, and argillaceous particles, rough to the touch, and easily diffusible in water. These earths are of various colours. Yellow is the one most prevalent and best known: but the varieties of ochres comprise also red, green, blue, and black.

Octagon. [ὀκτώ, eight, and γωνία, an angle or corner, Gr.] *In architecture.* A figure of eight sides and angles; and which when all these sides and angles are equal, is denominated a *regular octagon,* or one that may be inscribed in a circle.

Octostyle. [ὀκτώ, and στυλος, a column, Gr.] *In ancient architecture.* The term applied to that variety of temple or other ornamental building, the principal façade of which is adorned with eight columns. See Intercolumniation.

Ocular. [*oculus,* Lat. an eye.] *In archaiology.* Antiquaries have appropriated this term to certain stones whereon are found engraven the name of some surgeon-oculist, together with the remedies proper for diseases of the eye. Caylus countenances the opinion of the Abbé Le Beuf, who thinks, with some likelihood, that these stones served as tickets or labels, and were attached as such to the medicines which the leech or surgeon dispensed, in order to guarantee their authenticity. Spon, in his *Miscellanea,* p. 237, and Caylus, in the *Recueil d'Antiquités* (first vol. 90th pl. and 225 and following pages), have published several of these antiques.

Odeon or Odeum. [ᾠδεῖον, Gr. from ᾠδή, a song.] *In ancient architecture.* This name was given among the Greeks to a species of theatre, in which the poets and musicians submitted their works to the approval of the public, and disputed for the prizes awarded to the successful candidates. It is probable, however, that this was not the original object of the odeon, Pericles not seeming to have had it in view when he built that at Athens, which served as a magazine wherein to deposit all the paraphernalia used in religious and other solemn processions, and had likewise another destination, namely that of offering under its portico a shelter to the spectators assembled in the theatre of Bacchus (by the side of which it was erected) in case of surprise from bad weather. It was not, apparently, until a later period that the odeon became itself a theatre or saloon for the purposes of music and declamation. Sometimes, even, it is said to have been used by the Archontes, as a council-house in which they dispensed the decrees of justice.

The form of the odeons resembled that of other theatres, except that they were inferior in point of extent, and were covered with a roof. The inside of that built by Pericles, before alluded to, was filled with seats and ranges of pillars, and on the outside the roof descended shelving downwards from a point in the centre, with many bendings, in imitation of a famous pavilion of the king of Persia. Vitruvius is of opinion that the roof of this building was constructed of the masts or sail-yards of Persian ships which the Athenians had taken in their war with that people.

It is probable that this odeon at Athens was the first edifice of its kind erected in Greece. Led into error by an obscure passage of Vitruvius, several modern authors (such as Bulenger and Onuphrius Panvinius) have supposed it to have been part of the theatre of Bacchus; there can however exist no rational doubt as to this matter. Besides that the passage alluded to is capable of a construction quite foreign to that given it by these writers, the researches of Chandler (see the second chapter of his *Travels in Greece*) put the matter beyond dispute. Not only was the odeon

a perfectly separate structure, but it was even situated at some little distance from the other.

Another mistake which has been made on the present subject by certain intelligent writers is, that there existed but one odeon at Athens, they having confounded together the different buildings of this kind, the ruins of which have been discovered in that city. Now, it may be asserted with considerable confidence that there were three: viz. the one already described, and built by order of Pericles; another, spoken of by Pausanias; and that which was erected by Herodius Atticus.

The odeon of Pericles was situated to the south-east of the Acropolis, between the extremity of the street of tripods and the theatre of Bacchus: that mentioned as the second, and commonly denominated by the appellation *Pnix*, served as a place of public meeting, or assembly, for the Athenian citizens. On the destruction of the first mentioned edifice, however, namely that of Pericles, it was appropriated, as Pausanias relates, to the purposes of an odeon.

The third Athenian odeon was that caused to be erected by Herodius Atticus in memory of his spouse Regilla. Chandler expresses an opinion that this superb edifice had been built on the ruins of the odeon of Pericles, which he erroneously conceives to have been situated to the right of the theatre of Bacchus, whereas Vitruvius, on sufficient authority, places it to the left. The situation of the building we are now speaking of was in fact at the foot of the Acropolis, and on the south-west side. Pocock, Le Roy, and Stuart all speak of magnificent ruins lying in this direction, and which they imagine, from their extent and splendour, to be the relics of the celebrated theatre of Bacchus. But if the observations of Chandler on the relative situations of these two buildings are examined candidly, it will appear plainly that the travellers before mentioned are deceived in their opinion, and that these ruins actually belong to the once stately odeon of Herodius; whilst on the other hand the remains to which Stuart applies that name form those of the theatre of Bacchus. A passage in Philostratus, who (probably from heedlessness) gave the title of odeon to that theatre itself, might have contributed to the mistake.

According to Pausanias, in whose time it was constructed, the odeon of Herodius was one of the noblest and most majestic edifices in all Greece. The ruins yet existing, indeed, attest sufficiently its former grandeur, although the hand of the spoiler Time has well nigh obliterated every trace of its shape and proportions. An idea of its size may be obtained from some of the walls which yet stand, and here and there a broken column, or part of a façade still entire, yield evidence of the stately arcades which in ancient days rose over the persons of the sprightly and intellectual Athenians.

Other Grecian cities built odeons, but the only two of which distinct mention has been made are the cities of Corinth and Patræ. According to Philostratus, the odeon of Corinth was also built by order of Herodius Atticus. That of Patræ, however was far the most magnificent of the two, and indeed yielded in splendour to none in Greece, with the single exception of that of Herodius at Athens. Amongst the numerous works of art with which it was adorned, one above all excited the admiration of the spectators—namely, a remarkably fine statue of Apollo. The inhabitants of Patræ are reported to have built this theatre with the treasure acquired in a war between the Ætolians and the Gauls, the former of whom they had assisted.

Several cities of Asia Minor had also their odeons. That of Smyrna was, according to Pausanias, supereminent, from having possessed a picture of Apelles, representing the Graces. Pocock and Chandler have discovered at Ephesus and Laodicea ruins which they regard as having formerly constituted a portion of structures of this kind.

It was not until a late period of its history that the city of Rome possessed any theatre of this particular kind. Fabricius, in his *Description of Rome*, indeed, puts forth an opinion that in the times of Cicero such a structure was in existence; but this opinion appears to want the necessary proof. If such a building had then existed, contemporary writers would doubtless have made unequivocal mention of it. Fabricius deceives himself again when he speaks of another odeon, which he places in the vicinity of the Palatine Mount. He states that Rome contained altogether four odeons, whereas, according to the united testimony of various authors, living in different ages and writing quite independently of each other, it never had more than two. Of these, the first was erected by Domitian. Among the other public games celebrated by that emperor in ho-

nour of the Capitoline Jupiter, he instituted combats of music, and for the purpose of displaying these he built his odeon. Most probably, before this period, musical prizes were unknown at Rome—at all events there are no records of any. The Romans, to say the truth, were fond of *pleasures* of a grosser and less imaginative nature—such, for instance, as the combats of gladiators with each other, or with wild beasts. The second odeon was constructed at Rome by order of the emperor Trajan, on the design of the architect Apollodorus, who directed likewise the other great public works of that sovereign.

Besides these odeons in Rome itself, it is, no doubt, to Roman skill and munificence that the existence of several others is to be attributed. In Carthage, for instance, which had been indebted for its entire re-establishment to Julius Cæsar, an odeon was erected by Septimius Severus, who, himself an African, showed great liberality to the African states, and above all to Carthage. There was likewise an odeon at Pompeii. Among the ruins of that city, by the side of the great theatre (see POMPEII) was discovered the remains of a smaller edifice bearing a similar shape, and which, judging by its style of architecture, as well as by an inscription on its walls, must have been a building of this sort. The odeon of which the relics have been found at Catana, in Sicily, was also most probably constructed by the Romans. Like that at Pompeii, it is situated by the side of a regular theatre, to which it approaches so nearly that a narrow gallery would be sufficient to connect them. There is still to be perceived a portion of the rows of benches upon which the spectators were seated, as well as vestiges of the place appropriated to the singers and musicians: but the greatest part of the ground is unfortunately covered with wretched huts, and barracks.

ŒCONOMY. [from οἶκος, a house, and νέμω, to distribute.] *In architecture and painting.* The term œconomy is employed in architecture in two significations. In its simple sense it implies sparingness or paucity of means, of materials, of embellishments: in its figurative acceptation, it is used to express a judicious and harmonious combination, good taste, and a disposition of parts at once skilful and unloaded. Ornaments should never be needlessly multiplied about a building. Their very beauty and effect are dependent on their comparative rareness. In this respect, as in most others, good taste is, comparatively speaking, an unexpensive thing.

In painting, in like manner, the word œconomy refers itself to the agreement, the harmony of grouping and of colouring, in a word, the *tout ensemble* of the artist's performance.

OFFICE. [*officium*, Lat.] *In architecture.* A place or apartment appointed for clerks and officers to attend in, in order to discharge their several duties and employments; as, for instance, the secretary's office, ordnance office, excise office, signet office, paper office, pipe office, six-clerks' office, &c.—Also, all those apartments provided for the necessary occasions of a palace or other great house; as kitchens, pantries, confectionaries, &c.

OGEE. *In architecture.* A sort of moulding, called a *cyma reversa*, consisting of a round and a hollow.

OGIVE. *In architecture.* An arch or branch of a Gothic vault; which, instead of being circular, passes diagonally from one angle to another, forming a cross with the other arches. The middle, where the ogives cross each other, is called the *key;* being cut in the form of a rose, or a *cul de lampe.* The members or mouldings of the ogives are denominated *nerves, branches,* or *reins;* and the arches which separate the ogives, double *arches.*

OIL. [œl, Sax. *oleum*, Lat.] *In painting.* An unctuous inflammable substance, drawn from various bodies, both animal and vegetable. From the peculiar properties of different oils, they are naturally divided into two kinds, the fixed or fat oils, and the volatile or essential oils: the former demand a high temperature to raise them to a state of vapour, but the volatile oils are volatilized at a temperature of boiling water, and even at a lower one. Both the volatile and fixed oils may be obtained from plants, and sometimes from the same plant, but always from different parts of it. While the *seeds* yield the *fixed* oil, the *volatile* is extracted from the bark or wood.

In the arts, fixed oils are of the most extensive utility. They are employed in the fabrication of soaps for mixing colours in painting, for some kinds of varnish, and for defending substances from the action of air and moisture. The greater or less period of time these unctuous substances have been subjected to the action of fire, the greater or less is their degree of thickness and consistency. The oil of walnuts is especially serviceable to the painter in grinding and diluting his colours; and

that of the aspic (a species of lavender) has also been strongly recommended for the purpose of rendering the colours already mixed smoother, firmer, and more siccative. The oil of the white poppy, extracted from the plant of that name, is clearer and whiter than any other. That produced from flax is of a deep yellow, and very fat. M. Millin speaks of boiling this or walnut oil with litharge and onions until the latter are reduced to cinder: this composition, he says, is useful to mix with black, brown, and other colours which have little body and do not dry readily.

Oil Painting. See Painting.

Olfactorium. [Lat.] *In archaiology.* A small box, somewhat resembling a snuff-box, which was used by the ancients to carry perfumes or the like about in. Buonarotti, in his *Osservazioni Sopra Medaglioni antichi*, has given (pl. 36, Nos. 4 and 5) two medallions which are at present to be seen in the Royal Library at Paris. One is of Commodus, the other of Julia Augusta. They are hollowed, and shaped somewhat in the form of a box with a lid. He mentions also having seen a medal of Nero, and another of Heliogabalus, both hollowed and worked all over. These likewise bore the shape of snuff-boxes, and he believes that they might have served as small smelling-boxes, commonly called *olfactorioles*. They preserved in the cabinet of the Imperial Library some other medals similarly worked.

Olive. [*olive, olivier,* Fr. *olea,* Lat.] *In archaiology.* This tree was held to be particularly consecrated to Minerva: we also find, on several monuments, that goddess crowned with olive, of which she likewise holds a branch in her hand. Hence these representations of *Minerva* have acquired the addition of *Pacifera.* The olive is also placed in the hand of Mars Pacifer, on the reverse of a medal of Maximian. The olive, generally regarded as the symbol of peace, was however also that of victory and chastity. It was alike an attribute of triumphant warriors, and victors at the Olympic games. Amongst the ancients, brides, also, bore crowns of olive. The branch of olive, perceived in the hand of figures personifying Spain, indicates that the provinces of that country are celebrated for the production of this fruit. Winckelmann reports that peace is allegorized on the sepulchral stones of the early Christians, by the figure of a dove bearing an olive branch in its beak. The wild olive is frequently to be seen upon antiques. The club of Hercules and other heroes, as well as the sceptres of kings, were said to be made thereof. The ancients were in the habit of planting the wild olive tree in the front of their temples.

Onychites. [Lat.] *In archaiology.* A very beautiful species of alabaster, thus denominated by Pliny. The name has also been applied to those elegant little alabaster perfume-boxes, most generally known among antiquaries by the name of *alabastrum* or *ἀλαβαστρον.* See Alabaster, Alabastrites.

Onyx. [*ὄνυξ,* Gr. a finger or toe nail.] *In gem sculpture.* One of the semipellucid gems, with variously coloured zones, but scarcely any red; being composed of crystal debased by a small admixture of earth, and made up either of a number of flat plates, or of a series of coats surrounding a central nucleus, and separated from each other by veins of a different colour, resembling zones or belts. We have four species of this gem. 1. A bluish-white one, with broad white zones. 2. A very pure onyx, with snow-white veins. 3. The jasponyx, or horny onyx, with green zones. 4. The brown onyx, with bluish-white zones. The ancients attributed wonderful properties to the onyx, and imagined that, if worn on the finger, it acted as a cardiac. They have likewise recommended it as an astringent, but at present no regard is paid to it whatever. The word, in the Greek language, signifies *nail:* the poets feigning this stone to have been formed by the Parcæ or Fates from a piece of Venus's nails, cut off by Cupid with one of his arrows. Antiquarians, however, have differed very greatly with regard to the real cause of the derivation of the name of this stone from the *ὄνυξ* of the Greeks, and various fanciful resemblances between it and the substance of the finger-nail have from time to time been assigned as the origin of the appellation. Kœhler, from the tenor of what he says, seems to incline to an opinion that the term *onyx* is, in point of fact, not derived from the Greek word *ὄνυξ,* but that, it is merely a corruption of the name which this stone had borne in some oriental language.

The ancients have engraven a number of designs, without much merit, however, upon cornelians of the finest hue and greatest purity. At the present day stones of this quality are very difficult to be met with, and hence Natter has inferred that the ancients were possessed of some secret whereby they were enabled to refine and to clarify both cornelians and onyxes. The truth is, that there is not one in a thousand

amongst those now discovered which have a similar degree of purity and fire. No traces, however, are discernible in the writings of the ancients which might lead us to a discovery of their system, or even warrant us in concluding that they possessed one. Pliny, by the way, speaks of a process for the clarification of gems: he says, that they would become more brilliant if boiled in honey, principally that of Corsica. He adds, that the flowers of the box-tree, very abundant in that island, gave to the honey coming from thence its superior quality. Lessing proposed a repetition of this experiment, with honey in which the leaves or flowers of the box should have been infused, but the success is doubtful. The Italians possess a peculiar method by which an additional degree of purity is given to occidental stones.

Opal. [ὄπαλος, Gr.] *In gem sculpture.* A hard, half-transparent stone, which has the power of reflecting different colours. This species of precious stone is held in very high estimation, owing, perhaps, chiefly to its changeable appearance. The shape of the opal is similar to that of a pebble, like the agate-stone, with which several authors have classed it, from a supposed resemblance, which, however, presents no proofs whatever. On the contrary, Bergman's analysis points it out to be of a very different nature from that genus of flint of which the agate is a species; magnesia constituting a large part of its composition, and not entering at all into that of the agate, if we are to judge from the analysis of the parent species, or flint, there being none yet published of agate.

No method of estimating the opal is, so far as we are at present aware, given by any author. Such, however, as are of unusual size and lustre will fetch enormous prices.

The Russian general, Prince Potemkin, purchased, for the sum of one thousand ducats, a stone of this kind, said to have been taken by the famous Nadir Shah from the head of a Gentoo idol, of which it formed one of the eyes. By what circuitous road it found its way to the Russian prince does not appear: but it is said to have disappeared, together with many other gems, from the tent of the Persian conqueror, when he was assassinated. It is related that Nonnius, a Roman senator, seemed willing rather to forfeit his life than to cede an opal to Mark Antony. A beautiful oriental stone, of one inch diameter, and of immense value (sometimes described as a cat's eye, and sometimes as an opal), was in the possession of the late Leopold the Second, Emperor of Germany.

Opals are generally discovered in detached pieces, in an envelop of a different kind of stone, from the size of a pin's head to that of a walnut. Beautiful opals of this last size are extremely rare: so that it is difficult to find an opal sufficiently perfect and large to be completely possessed of all its beauties. This renders it so precious, and makes it indeed almost impossible to determine its value. It has, however, we believe, been agreed to estimate a beautiful oriental opal at double the price of a sapphire of the same dimensions.

It is very observable, that all the colours of the opal may entirely change or disappear when the stone is divided into pieces. This phenomenon, which has been frequently demonstrated by experience, induces us to think that all the sparkling play of the opal is owing to the refraction of the rays of the sun from the surface of the stone, which is formed by nature to produce this refraction.

In the middle ages, this stone was denominated *orphanus* (the orphan); that, at all events, is the name given by Albert the Great to an opal in the imperial crown, on account of none resembling it being supposed to exist.

Openings. [open, Sax.] *In architecture.* Those parts of the walls of a building which are left unfilled up, for the purposes of admitting light, air, &c. These should be distributed symmetrically and tastefully, and so as to avoid, as far as possible, the monotonous tone which is given to most of our modern streets by the never ending repetition of the same kind of undecorated and ugly looking apertures. See Architecture, Door, Gate, Window.

Opera-house. *In architecture.* A theatre for the express purpose of performing musical dramas. The theatres entitled *La Scala*, at Milan, and *San Carlos*, at Naples. are among the most celebrated structures erected with this view in Europe. The Italian Opera-house at Vienna is also very fine. The king's theatre in London is a very capacious and splendid building, nearly twice as large as either of the other theatres, and surrounded by a handsome portico. It was built in the year 1797 by Noveskielsky; and the exterior finished by Mr. Nash a few years ago. It has been found necessary, within these few months, to submit its interior to several radical repairs.

Ophis. [Lat.] *In archaiology.* Menan-

der and Lucian give this name to a species of bracelets, which were of a revolving or serpentining shape. In the second volume of the *Bronzi d'Ercolano*, plates 4 and 25, we find two statues, each of which bears bracelets answering the above description.

Ophites. [Lat.] *In sculpture and architecture.* A kind of variegated or diversified marble, bearing a ground of a sort of dusky green, and sprinkled with spots of a lighter green. The Italians call it *il serpentino antico*, from the resemblance of its colour to that of the skin of a snake. Pliny cites several species of *ophites:* one of a soft substance and white; another black and hard; and a third designated *tephria*, which was of a grayish hue. Dioscorides says of this last, that it is of the colour of ashes, and sprinkled with dots or points: Pliny denominates it also *memphites*, and describes it as bearing spots of the size of little pebbles, as being heavy in appearance, and of various colours. The same author says expressly, that no marbles were used in the fabrication of statues, except such as were of one colour only. A certain artist of his times, by name Vitruvius Pollio, sent to Rome a statue of the Emperor Claudius, made of variegated marble, which innovation was disapproved of. The same sculptor also executed a similar statue in porphyry, but this style likewise remained without imitators.

Opima spolia. [Lat.] *In archaiology.* Armour or other spoils of war taken from a vanquished enemy.

Opisthodomus. [ὀπισθόδομος, Gr. the back part of a house.] *In archaiology.* This Greek term, which corresponds, in the meaning applied to it, with the Latin word *posticum*, is the appellation given to the hinder part of a temple, where there is a regular entrance, and a façade of columns as in front. Some authors appear to have mistaken the use of the word *opisthodomus*, and to have applied it to the door or gate itself admitting one into the back part of the temple, whereas it was, in fact, a portion of the space withinside. It was customary amongst the ancients to preserve their treasure, public records, images, &c. in this part of their sacred buildings: the opisthodomus was therefore often made very extensive, and was situated immediately behind the Cella (see that word). The two most celebrated opisthodomes of Greece were those of the temple of Jupiter at Olympius, wherein they deposited those precious objects which had been consecrated to it by the piety of the people; and that of the temple of Minerva Polias at Athens, which served as a receptacle for the treasures of the republic. This temple of Minerva Polias was not the one of which the ruins still exists, but another much more ancient, of which no vestige whatever remains. Stuart is deceived in supposing that this opisthodomus, of which mention is made by Pollux, formed the back part of the Parthenon. See Parthenon.

Opposition. [Fr. *oppositio*, Lat.] *In all the arts.* Or contrast. This is one of the nicest principles of art, and requires a very considerable portion of skill. Contrast, when not too violent, brings out into striking and pleasant relief all the various parts of a work, and heightens the beauty of each. A just eye both for proportion and colour is the main requisite for this department of art. The management of light and shade is of peculiarly great importance to the painter, and he should be very careful, in this matter, not to be seduced into outrageous and unnatural oppositions. The works of Rembrandt are quite stupendous examples of masterly composition in this way, but they are, at the same time, somewhat cautiously to be recommended as models to the young painter, inasmuch as the attempt to copy them would infer a hazard of deviation from *contrast* into *contradiction*, an error most sedulously to be guarded against. That great master's own works often stand themselves, in this respect, on the very confines of the extravagant. The pictures of Rubens, Giorgione, Tintoretto, &c. are safer guides; and at the same time admirable ones. To a deep feeling of the real and natural, these illustrious artists appear to have added a strong sense of abstract beauty; and to this and incessant study (without which no portion of genius is sufficient) is to be ascribed their consummate success in the principle of art now under consideration, as well as in others. We find likewise excellent specimens of the application of contrast or opposition in the performances of Daniel de Volterra, and of the immortal Raffaelle. In fact, the application of this principle enters, in greater or less degree, into the works of all the principal artists of name and note. See Contrast.

Optics. [οπτικη, Gr.] *In all the arts.* The science of the laws by which the rays of light form a luminous point, and reach the eye: that is, the knowledge of the causes of vision, and of the effects of light, direct, reflected, or refracted. In this comprehensive sense, Newton denominated

his book of light and colours *optics*. In a simpler application, optics is the science of direct vision only; while that of the laws and properties of the rays of light, when considered as reflected, is called *catoptrics*, and the science of refracted rays *dioptrics;* so that in a general sense, *optics* comprehends the *whole* of that of which catoptrics and dioptrics are two parts. It also includes the science of perspective. In our article LIGHT we have given some observations connected with the present subject, to which we beg leave to refer the reader, as also to ANAMORPHOSIS, CHIAROSCURO, MOON, PERSPECTIVE.

ORANGERY. [*orangerie*, Fr.] *In architecture.* A kind of hothouse, constructed for the purpose of cultivating and preserving from the action of the air in cold weather the beautiful and refreshing fruit from which this sort of conservatory derives its name.

ORATORY. [*oratoire*, Fr.] *In architecture.* A closet, or similar apartment near a bedchamber, constructed principally in the mansions of Roman Catholic families for the purposes of private devotion. These are generally furnished with an altar, crucifix, &c. according to the taste or opulence of the parties: sometimes also with an organ, or with religious paintings.

ORCHESTRA. [ὀρχήστρα, Gr.] *In architecture.* That part of the interior of a theatre situated between the stage and the audience part of the house. It bore the same situation amongst the ancients as at present, but was applied to purposes somewhat different. In the Greek theatres the chorus danced here, and in that of Athens a kind of altar was erected in the ὀρχήστρα, called the θυμέλη (*thymele* among the Romans), which sometimes served to offer sacrifices on to Bacchus (whence the edifice was named the Theatre of Bacchus), and sometimes as a tribune from which orations were made by the magistrates and orators to the assembled people, it being customary for the Greeks often to hold public meetings in their theatres. It is probable that this altar, as well as the orchestra itself (of which it formed the centre) was sunken somewhat below the level of the proscenium (as in modern days), in order that the view of the performance on the stage might not be interrupted.

In the Roman theatres, the orchestra was commonly much smaller than among the Greeks, since they were not in the habit of having dances of choruses. It was appropriated to the senators, patricians, vestals, and other people of distinction who went to witness the performances.

ORDER. [*ordo*, Lat.] *In all the arts.* This term may be defined as signifying method or regular disposition, from which results uniformity to the plan proposed, and a general sense of harmony. In the absence of this principle, unsightly confusion and jarring effects must necessarily prevail; and if the imagination is suffered to expand, and embrace the globe itself, the absence of order would cause the return of all those several elements of which it is compounded into their primeval state of anarchy and chaos. That we may be still more impressed with the beauty and necessity of order, let us consider for a moment the various materials used in art in their simple and uncombined nature. A quantity of stones, for instance, lying about confusedly upon the ground, are incapable of producing in our minds any emotion whatever, or at least a disagreeable one: but, called into regularity and order by the skill of the architect, they become an object of attention and gratification. A painter's pallet furnishes a similar illustration. There lie scattered, in uninteresting confusion, the actual colours and oils which, transmitted to the canvass, afterwards start into life, and awaken in the spectator feelings of the most ardent admiration. The artist of musaic-work produces his effects (and they are often among the most beautiful in the whole scope of imitative art) from little pieces of marble, glass, or other substances, which, seen separately, or mixed and mingled together in a box or bag, would be altogether unsightly, and considered rather in the light of rubbish.

Order may either be simple or complicated. In a work of small proportions detail and particularly *disposition* are eminently desirable: on the other hand, in buildings or paintings which are meant to produce a grand and noble effect, it is unwise to be too scrupulous or finical about the regulation of minute parts. Order in some degree complicated has, it is true, in most instances, a certain charm; but it is, in some, calculated to weaken, rather than strengthen, the impression made upon the heart and imagination. The artist should also be careful, wherever his material is of a coarse or inferior nature, to compensate, as far as he can, for this by increased attention to regularity and order. See DISPOSITION, DISTRIBUTION, RULES.

ORDERS. [from *order*.] *In chivalric painting*, &c. Thus are designated the several military or religious institutions which have from time to time been established

either by secular or spiritual authorities as marks of distinction or desert. Such are the Orders of the Garter, the Bath, of Saint Esprit, of the Golden Fleece, &c. among the former class; and those of the Jesuits, of the Benedictines, of the Cistercians, &c. among the latter. There are also certain mixed orders, which partake of the nature of both; among them may be ranked the Knights of Malta, of St. John of Jerusalem, of Calatrava, the Knights Templars, &c.

It is necessary that the artist should gain some acquaintance with these several establishments, in order that he may avoid the running into mistakes or anachronisms in any subject wherein they may be introduced. For instance, it would be extremely absurd to invest a cavalier of the age of Louis IX. with the exterior decorations of a knight of the order of St. Michael, which was not instituted until the reign of Louis XI. Information on this subject may be acquired by reference to the more enlarged treatises on heraldry.

ORDERS OF ARCHITECTURE. These, as now executed after the Roman system, are five, and ranged as follow:—the *Tuscan*, the *Doric*, the *Ionic*, the *Corinthian*, and the *Composite*.

We have in our article on ARCHITECTURE given an account of the origin of the different orders, together with the relation which they may be considered to hold in the estimation of a correct taste. In that, under the head of CAPITAL, also, is afforded a description of the various ornaments forming that essential part of the whole column: we shall therefore content ourselves, in conclusion, with giving a short summary of the several characters of the orders, adding a description, from the valuable works of Sir William Chambers, of the modern proportions of each.

Of the TUSCAN order little can be said in addition to what will be found by the reader in other parts of this work, there being no regular example of it among the remnants of antiquity. Piranesi has given a drawing of a Tuscan base, but of what date is uncertain. Vitruvius, in an indistinct manner, has mentioned the general proportions, but through his whole book does not refer to one structure of this order. The plainness of its appearance caused it, no doubt, to be a good deal neglected at Rome.

The height of the column is fourteen modules, or seven diameters: that of the whole entablature, three modules and a half, which being divided into ten equal parts, three are for the height of the architrave, three for the frieze, and the remaining four for the cornice. The capital is in height one module: the base, including the lower cincture (which is peculiar to the measurement of this order) of the shaft, is also one module; and the shaft, with its upper cincture and astragal, is twelve modules. In interior decorations, the height of the column may be fourteen modules and a half, or even fifteen modules, which increase may be in the column only. [It is customary, in executing this order, to diminish it one quarter, but perhaps without sufficient reason; as its character of extraordinary strength would be better preserved by the usual diminution of one-eighth or one-sixth.]

The DORIC possesses nearly the same character for strength as the Tuscan, but is enlivened by its peculiar ornaments; the triglyph, mutule, and guttæ, or drops, under the triglyph: these decorations characterize the Doric order, and in part are inseparable from it. The proportions of this order recommend it when united strength and grandeur are requisite.

The height of the column, including its capital and base, is sixteen modules: the height of the entablature four modules; which being divided into eight parts, two are for the architrave, three for the frieze, and three for the cornice: the base is one module in height; the capital thirty-two minutes, or a little more. See DORIC.

The IONIC order partakes of more delicacy than the former, and therefore, as well as on account of its origin, is called *feminine*, and not improperly compared to a matronly appearance. It forms a medium between the masculine Tuscan and Doric, and the virginal slenderness of the Corinthian. The boldness of the capital, with the beauty of the shaft, makes it eligible for porticoes, frontispieces, entrances to houses, &c. Denteles were first added to the cornice of this order.

The height of the Ionic column is eighteen modules, and that of the entablature four modules and a half, or one quarter the height of the column, as in the other orders, which is a trifle less than in the regular antique Ionics: the capital is twenty-one minutes, and the base thirty minutes in height; the shaft of the column may be plain or fluted, with twenty or twenty-four flutings, whose plan may be a trifle more than a semicircle, because they then appear more distinct; and the fillet or interval between them must not be broader than one-third of the breadth of the fluting, nor narrower than one-fourth thereof; the ornaments of the capital are

to correspond with the flutings of the shaft; and there must be an ove above the middle of each fluting. The entablature being divided into ten equal parts, three are for the architrave, three for the frieze, and four for the cornice. In interior decorations, where much delicacy is required, the height of the entablature may be reduced to one-fifth of the height of the column.

Denteles properly belong to the Ionic cornice; they represent the *assers*, or smaller rafters, which support the tiles.

The volute of the capital of this order is now generally executed on an angular plan, the same as in the Composite; so that, viewed in every direction, it presents the same appearance: this differs from the general mode of the antiques, which was to have the volutes parallel. And to Michel Angiolo this was attributed as a new invention; but examples are found in the capitals of the angle columns in the temple of Erictheus at Athens, and in that of Fortuna Virilis at Rome.

Piranesi has endeavoured to prove the first idea of the Ionic volute to have been derived from shells: be this as it may, many pleasing forms of convolution may be obtained from the section of shells.

The CORINTHIAN possesses more delicacy and ornament than any other order. The beauty and richness of the capital, with the slenderness of the pillar, render it very properly adapted where magnificent elegance is required. It is frequently used for internal decoration to entrance halls, and to spacious or state rooms: the appearance is that of virginal delicacy and gay attire. This order, in the opinion of Vitruvius, "differs from the Ionic only in its capital; the Ionic capital having no more than one-third of the diameter of the column for its height; but the Corinthian capital is allowed one entire diameter, which gives to the column a noble but delicate grandeur. The other members placed on the Corinthian pillar are common to the Doric and Ionic orders, for it has no particular species of ornament peculiar to its cornice: sometimes it has the Doric mutules and triglyphs in the architrave; sometimes an Ionic frieze, with denteles in the cornice: in a manner, it is no more than a third order, sprung out of the former two, which has nothing peculiar to itself except the capital." Vitruvius, however, in the foregoing account, forgets the peculiarities of the Corinthian cornice, or, the entablature to this order was not in his day practised in the manner we find remaining among ancient buildings; for to this cornice the modillion is ever an attendant. But exactly according to this description of Vitruvius is the cornice of the portico at Athens called Ποίκιλη, as represented by Stuart. The splendour and elegance of this order have rendered it very famous, and the numerous examples existing among the fragments of antiquity sufficiently evince the great esteem with which it was regarded.

The Corinthian column, as executed by the moderns, is, according to Chambers, twenty modules in height; the entablature five modules; the base one module, and which may be either Attic or Corinthian; the capital has seventy minutes in height; the proportion of the members of the entablature is the same as in the Tuscan and Ionic orders. If the entablature is enriched, the shaft of the column may be fluted, and the flutings may be filled to one-third part of their height with cabling, which will strengthen the lower part of the column, and make it less liable to injury. In very rich interior decorations, the cabling may be composed of reeds, ribands, husks, flowers, &c. The capital is enriched with olive leaves, at least almost all the Roman antique specimens of this order are so: the acanthus is more peculiarly employed in the Composite order. The entablature to the Corinthian may be reduced to two-ninths, or one-fifth of the height of the column, in which case it may be best to use the Ionic entablature, or reduce the denteles of the cornice.

The COMPOSITE or ROMAN order owes its origin to that constant solicitude after novelty which ever renders the mind of man restless in enlightened and highly cultivated ages. The desire of variety and novelty, either of invention or combination, stimulated the Roman architects to unite with the proportions and enrichments of the Corinthian order the angular volute of the Ionic, and by this union to compose a new order.

Its proportions are as follow:—The height of the column is twenty modules, and that of the entablature five modules. The capital has seventy minutes in height; the base measures the same as in the Doric and Ionic orders; and as the module is less, all its parts will of course be more delicate. The shaft may be enriched with flutings to the number of twenty or twenty-four, as in the Ionic order; there is no reason why they should be augmented. The principal members of the entablature may have the same proportions as the two former orders, viz. being divided into ten equal parts, three are for

the height of the architrave, three for the frieze, and four for the cornice.

We will take this opportunity, before we conclude, to notice (not, however, by way of recommendation) that there are ancient examples of oval columns, where the circle of the column is elongated by a broad plain space on the two opposite sides of the shaft. Of this description were some fragments found in the island of Delos by M. Le Roy. There are two others at *La Trinite du Mont*, at Rome: also in the tomb near Mylasso in Greece, according to M. De Choiseul. This elegant structure is very perfect; of a square form, on a basement; the pillars insulated, and supporting a vaulted cieling highly enriched: each front has two oval fluted columns with the narrow face outwards; at the angles are pilasters having the same enrichments as the columns; the capitals are Composite, and the volutes are omitted. This elegant little *morceau* is of white marble, and about nineteen feet square.

There have been various speculations and efforts made, at different periods, in order to construct a new order of architecture: but in the first place, this appears to be hopeless; in the second needless. An attempt of this kind was made in France by Philibert De Lorme, who proposed to make his column represent a tree, whose branches should be twisted underneath in order to form the entablature. Louis XIV. offered a prize to the architect who could succeed in the invention of a sixth order. In Italy Piranesi built a church at Rome after a new order, the capital of which is symbolical. In our own country two artists, Evelyn and De La Roche, each designed a new order. In Germany L. Sturm pretended to have founded one, which he styled the *German Order*, and the chief variety of which consisted in the capital of the column having only a single range of leaves, with sixteen volutes. Wagner, also, proposed a sixth order of architecture in a German work, published at Leipsic in 1728. Perhaps it was with great reason and good judgment that a certain Italian architect declared he never would even read any work which contained one of these propositions.

The principal works which throw light on this particular branch of architecture are:—*Edifices antiques de Rome dessinés et mesurés tres-exactement*, by ANTHONY DESGODEZ, architect, Paris, 1682, folio. *Les plus beaux Monumens de Rome ancienne*, &c. *dessinés* par BARBAULT, Rome, 1671, folio. *Reliquiæ antiquæ Urbis Romæ, quarum singulas delineavit, dimensus est, descripsit atque in æs incidit* BONAVENT. AB OVERBECK, &c. Amstelod, 1703, 3 vols. folio. *Le Antichité Romane*, Opera di Gian. Batt. PIRANESI, Rome, 1756, 4 vols. folio. *Del Palazzo di Cesari; sive de regiis antiquorum Cæsarum Ædibus*, Opera post. di Franc. BIANCHINI, Ver. 1738, fol. *Les Ruines des plus beaux Monumens de la Grèce*, by LE ROY, Paris, 1758 and 1769, folio. *Antiquities of Athens*, by STUART and REVETT, London, 1767, folio. *Ruins of Pæstum or of Posidonia*, by T. MAJOR, London, 1768, folio. *Ruins of Balbeck, otherwise called Heliopolis*, by WOOD and DAWKINS, London, 1753, folio. *Ruins of Palmyra, otherwise called Tedmor in the Desert*, by the same, London, 1753, folio. *The Ionian Antiquities*, by CHANDLER, REVETT, and PARS, London, 1769, folio. *L'Ordine Dorico, Ossia il Tempio d'Ercole della Città di Cori*, by Giov. Ant. ANTONI, Rome, 1785, folio, with engravings. *Arcifesto per formare con facilità liv cinque Ordini dell' Architettura*, di Ottan. REVESI BRUTI, Ven. 1627, folio. *Règle précise pour décrire le profil élevé du fust des Colonnes*, par George HURET, Paris, 1665, folio. *Traité des cinq Ordres d'Architecture tant anciens que modernes*, par N. DUPUIS, Paris, folio. *Dissertation sur les Ordres d'Architecture*, par FREZIER, Strasburg, 1738, 4to. Ch. LE BRUN, *Nouvel Ordre Français*, folio (containing ornaments and decorations for pavilions). *De l'Ordre Français trouvé dans la Nature*, par Ribart de CHAMOUX, Paris, 1783, folio. *A Proposition for a new Order in Architecture, with Rules for drawing the several Parts*, London, 1781, folio. See ARCHITECTURE, CAPITAL, COLUMN, BED MOULDINGS, &c.

ORDONNANCE. [Fr.] *In all the arts.* Disposition; the classification of different parts all combining to produce the entire effect.

In architecture it relates, accordingly, to the composition of a building, and the distribution of its details, both with regard to the whole and to each other; or, as it is expressed by Mr. Evelyn, the determining the measure of what is assigned to the several apartments. Thus *ordonnance* is the judicious contrivance of the plan or mould; as when the court, hall, lodgings, &c. are neither too large nor too small, but the court affords convenient light to the apartments about it, the hall is of fit capacity to receive company, and the bedchamber, &c. of a proper size. When these divisions are either too great or too small with regard to the whole (as, for in-

stance, where there is a large court to a little house, or a small hall to a magnificent palace), the fault is in the ordonnance. See ARCHITECTURE, INTERCOLUMNIATION, &c.

In painting, ordonnance is used for the disposition of the particular portions of a picture, such as the groups, masses, contrasts, &c. The species of ordonnance which it is incumbent on the artist to adopt must be regulated by his peculiar subject. An Asiatic subject, for instance, should be rich in its details, which on the other hand should be of a simpler nature, when the painting refers to the heroic ages. We may distinguish an ordonnance of a picturesque from one of a poetical character. The former may be defined as consisting of objects which strike from their natural grotesqueness, either of form or situation, or from their abstract beauty; the latter lifts these out of the circumstances in which they are commonly presented by nature, and bestows on them an increased and extraneous light which is reflected from the imagination. In order that the ordonnance may be good, it is necessary that those figures should be rendered most prominent, in every way, which are intended to demand the greatest measure of the spectator's attention. This is one of the most important rules requiring the historical painter's care. In every group, the several figures should present, in the most advantageous manner, the peculiar action and character calculated to bring out and give effect to the whole. Monotony or sameness either in the expression, the action, or position of the figures of a group fatigues the eye and the mind of the spectator. In the cartoon of Raffaelle representing St. Paul preaching at Athens, the *contrast* of the figures is admirable, whilst the group of apostles in that of the Death of Ananias has been objected to by several acute critics on the score of wanting that principle. Contrast is not only necessary, for the purposes of effect, between the different figures in a group, but between the various groups themselves introduced by the artist into his picture, and, in fact, between all the relative portions of a painting. However, at the same time, these contrasts should be managed with a degree of skill and discrimination sufficient to make them appear rather as the productions of accident than as the efforts of art. See PAINTING.

ORICHALCUM. [Lat. from ὀρίχαλκος, Gr. mountain copper.] *In archaiology*. It appears that the ancients used this word to signify, at the same time, a peculiar kind of metal and a mixture of metals. The natural orichalcum was a substance both rare and precious, according to several passages to be found in ancient writers. It was indeed esteemed as almost equal to gold itself, and was frequently employed as a substitute for that metal. These authors do not afford us any information respecting the countries from which the substance called orichalcum was extracted. The factitious species of orichalcum, or that compounded of several different metals, was also employed among the ancients in many different ways. Amongst the medals of Gallienus in the collection of Carpegna (now in the Royal Library at Paris), there are certain coins which have the appearance of being formed of a peculiar kind of white metal, bearing somewhat of the semblance of bar silver. Buonarotti presumes these to be of orichalcum. The author of an ancient work on sundry marvellous subjects (which work, by the by, has been attributed to Aristotle), speaks of a people of Pontus, called *Mossinici*, who were in the habit of making great use of a species of copper which was not (as commonly the case) mixed with tin, but with a sort of earth adherent to the copper itself, and which rendered it beautifully white and shining. He adds, that the discoverers of this secret would not confide it to any one else, and that consequently the process was lost.

Orichalcum was very well known to the Romans, who often took advantage of the resemblance of its best species to gold: for some sacrilegious characters, who could not resist the temptation of taking gold from temples and other public places, chose frequently to conceal their guilt by replacing it with orichalcum. It was thus that Julius Cæsar acted, when he robbed the capitol of three thousand pounds weight of gold; in which he was followed by Vitellius, who despoiled the temples of their gifts and ornaments, and replaced them with this inferior metal. Perhaps, after all, the kinds of orichalcum mostly in use for these purposes were very similar in appearance, if not wholly synonymous, to the brass of modern times. The value of our brass is much less than that of gold, and the resemblance between the two, in point of colour, is obvious at first sight. Both brass and gold, in fact, are susceptible of a variety of shades of yellow; if very pale brass be compared with gold mixed with much copper (such, especially, as is used by the foreign goldsmiths in their toys), a disparity may be observed: but the nearness of the resem-

blance is sufficiently ascertained in general, from the fact that substances gilded with brass, or, as it is commonly called, *Dutch-leaf*, are not readily distinguishable from those which are gilded with gold leaf.

We have already made allusion to the methods said to have been possessed by the ancients of *making* orichalcum as well as of *finding* it, and we may now add, that several ingenious mineralogists have expressed it as their opinion, that the materials which entered into the composition of this factitious substance were the same as those now used in making brass. On the other hand, there are authors of very great repute who think differently, and who consider the art of making brass as altogether modern. Thus M. Cronstedt does not think it fair to conclude, from old coins and other antiques, that the making of brass was undoubtedly known in the most remote times; and the authors of the French Encyclopædia assure us that our brass is a very recent invention*. It appears, however, from Pliny's Natural History, l. xxxiv. sect. 2, as well as from the concurring testimony of other writers, that orichalcum was not a pure or original metal; but that its basis was copper (as the reader will have observed in the former part of this article), which the Romans changed into orichalcum by means of *cadmia*, a species of earth which they threw upon the copper, and which was absorbed by it. It has indeed been contended that the cadmia of Pliny was native arsenic, an opinion scarcely meriting confutation, and which must appear extremely groundless when we reflect that it is impossible to make either brass or copper from arsenic, and that Pliny expressly calls it a *stone* from which brass was made.

On all hands, however, it seems to be admitted that there were two sorts of orichalcum—natural and factitious. The latter, there can be little doubt, weighing what has been advanced on either side, closely resembled (with some modifications as to hue) our brass. As to the former, there is no impossibility in supposing that copper ore may be so intimately blended with an ore of zinc, or of some other metallic substance, that the compound, when smelted, may yield a mixed metal of a paler hue than copper, and resembling the colour of either gold or silver. In Du Halde's History of China, we meet with the following description of the Chinese white copper. "The most extraordinary copper is called *de tong*, or white copper: it is white when dug out of the mine, and still more white within than without. It appears, by a vast number of experiments made at Pekin, that its colour is owing to no mixture: on the contrary, all mixtures diminish its beauty; for when rightly managed, it looks exactly like silver; and were there not a necessity of mixing a little *tutanag*, or some such metal with it, to soften and prevent its brittleness, it would be so much the more extraordinary, as this sort of copper is perhaps to be met with nowhere but in China, and there only in the province of *Yun-nan*." Notwithstanding what is here said of the colour of the copper being owing *to no mixture*, it is certain that the Chinese white copper, as brought to us, *is* a mixed metal; so that the ore from which it is extracted must consist of various metallic substances, and from some such ore it is possible that the natural orichalcum, if ever it existed, may have been produced.

We know of no country in which orichalcum is found at present, nor was it any where found in the age of Pliny, nor does he seem to have known the country where it ever had been found. He admits, indeed, its having been formerly dug out of the earth: but it is remarkable that, in the very passage where he is mentioning by name those countries most celebrated for the production of different kinds of copper, he only says, in general, concerning orichalcum, that it had been found in other countries, without specifying any particular one. Plato states that orichalcum was a thing only talked of even in his time; it was nowhere then to be met with, though in the island of Atlantis it had been formerly drawn out of mines. The Greeks were in possession of a metallic substance called ὀρίχαλκος before the foundation of Rome; for it is mentioned by Homer and by Hesiod, and by both of them in such a manner as shows that it was then held in great esteem. Other ancient writers have expressed themselves in similar terms of commendation; and it is principally from the circumstance of the high reputed value of orichalcum that authors are induced to suppose the ancient metal so called to have been a natural substance, and altogether different from the factitious one used at Rome, and probably in various parts of Asia.

This conclusion, however, cannot be va-

* Art. *Orichalque*. "The vessels here called brazen, after ancient authors, cannot have been of the materials our present brass is composed of: the art of making it is a modern discovery." See *Laugh ton's History of Ancient Egypt*, p. 58.

lidly drawn from the encomiums upon it: for at whatever time the method of *making* it was first discovered, both its novelty and scarceness (joined to its utility) would enhance its value—at least, there can be no absurdity in supposing, that when first introduced, it was greatly prized, even though it be granted that it possessed no other properties than such as appertain to brass.

Respecting the etymology of this word there has been a considerable diversity of opinions. Some antiquaries write it *aurichalcum*, supposing it to be compounded of the Latin word *aurum*, gold, and the Greek χαλκος, brass or copper. The derivation, however, most generally preferred is that which we have adopted, viz. ὄρος, a mountain, and χαλκος; alluding perhaps to its having been mostly found in mountains or mountainous countries. To the above two etymological meanings of the word, we will subjoin the following, in our opinion equally well founded, and certainly as ingenious as the other two.

The Hebrew word אוֹר signifies *light*, *fire*, *flame;* the Latin terms *uro*, to burn, and *aurum*, gold, are derived from it, inasmuch as gold resembles the colour of flame: and hence it is not unlikely, that *orichalcum* may be composed of a Hebrew and a Greek term, and that it is rightly rendered *flame-coloured copper*. In confirmation of this it may be observed, that the Latin epithet *lucidum*, and the Greek one φαεινὸν, are both applied to the orichalcum by the ancients.

We have gone into some little length on this subject, both because the metal in question has given rise to a vast deal of interesting speculation, and because the frequency of its occurrence in the relics of ancient art renders it desirable that the artist and amateur should possess something like sufficing information respecting it. We have been indebted, in the compilation of this article, to M. Millin (in his *Dictionnaire des Beaux Arts*), and to an intelligent paper in the second volume of *Memoirs of the Literary and Philosophical Society of Manchester*, written by the late Dr. Watson, Bishop of Landaff, and communicated by Dr. Percival.—To both these sources we beg, in conclusion, to refer the reader who may be anxious for a more diffuse account.

ORIENTAL. [from *oriens*, Lat. the East.] *In the history of art.* The eastern quarter of the hemisphere: in contradistinction to occidental.

The lapidary and engraver apply the term *oriental* to the purest and hardest species of precious stones. See OCCIDENTAL.

ORIENTAL STYLE. See STYLE.

ORIFLAMME. See STANDARD.

ORIGINAL. [from *origo*, Lat. a beginning.] *In all the arts.* This word has, with respect to art, more than one signification. In its more obvious and general sense, it is used as an adjective, and applied to such productions as possess the principles of novelty or invention, as distinguished from that of imitation or mannerism; but it is sometimes also made into a substantive, and it then means such works as are the undoubted performances of the great masters in any given art, or branch of art, a distinction which it is often very difficult to award justly, and which has been consequently given, over and over again, through want of complete evidence, to successful and spirited copies.

The love of gain also often contributes to this end, and miserable imitative daubs, without being spirited at all, or successful in any other way than in hoaxing the unfortunate purchaser, have frequently formed a wretched substitute for the genuine sterling gold of the would-be connoisseur. It is curious, indeed, to observe, that in every unimportant collection of pictures we meet with *undoubted* Rubens's, *undoubted* Poussin's, *undoubted* Claude's, &c. Now, however prolific the imagination, and however industrious the hands of these great artists might have been, still it is almost impossible that every one of these paintings should be *bona fide* originals. The fact is, that it requires the application of a man's whole time to obtain the knowledge requisite to enable him to decide in these matters, and even then, unless the *history*, traditional or recorded, of the picture in question assist him, there is, in many instances, still room for doubt. We shall probably say a few words more on this subject in the course of our article on PAINTING.

ORIGINALITY. See the preceding article, and also INVENTION, COMPOSITION, &c.

ORISON. [*oraison*, Fr. a supplication.] *In emblematical painting and sculpture.* Ripa represents this under the figure of a kneeling female, with outspread arms; in one hand she holds a fuming censer, and in the other a flaming heart, which she offers to heaven, from whence a ray of light descends towards her. This same emblem of the flaming heart is not much happier than the generality of Ripa's conceits. See PRAYER.

ORLE. [*orlo*, Italian, to hem.] *In architecture.* This is the little fillet or band

under the ovolo of the capital. The word is applied also, according to Palladio, to the plinth of the base of a column or pedestal.

ORNAMENT. [*ornamentum*, Lat.] *In all the arts.* Those smaller and more detailed portions of a work of art which are not essential to it, but added in order to augment its beauty or magnificence. A work which is wanting in respect of ornament is not necessarily on that account imperfect, but it may justly be considered as too bare or naked. Ornaments, therefore, are more or less valuable inasmuch as they are made by the artist to blend harmoniously with more important parts, and to assume to themselves the air of essentials.

Quinctilian, in treating of eloquence, seems to regard ornaments with a very severe eye, and as being rather calculated to please the mere amateur than the real connoisseur. The latter, says he, confines his attention to those things, in an oration, which are essential, and which lead to something, in preference to the tropes and flowers of speech which fall musically upon the ear, but make no appeal to the understanding; and the Greek artists were doubtless influenced by a parity of feeling and reasoning when they constructed their principal works, which are almost all very sober and sparing in point of ornament. With them, whenever ornaments are introduced, they are made to combine aptly with, while they are subservient to, the essential parts of their composition, and never are to be found stuck in without any other aim than the boyish one of diverting not the imagination but the eye alone, as gilt is stuck on gingerbread for children. There is, in fact, no department of art which requires greater care and skill, and a more refined taste, than that which superintends the distribution of ornaments. The artist, as a general rule, should adopt this maxim—to be sparing rather than profuse; since, as we have before observed, the entire absence of ornaments does not necessarily imply defect, whilst a work is unequivocally disfigured which is loaded with them. Some works of art, indeed, positively admit of very few ornaments, such, more particularly, as, in painting, represent an action of solemn or absorbing interest. When the aim is lighter and less important, ornament may be more freely introduced, but even then with caution and delicacy.

Among the most ancient nations respecting which accounts have come down to our times, ornaments were employed to decorate their buildings. They sought and found the models for these in Nature herself, rich in objects of beauty and convenience. At first they appear to have been fond of imitating the various appearances of trees, and adorning their edifices with branches, leaves, flowers, fruits, &c. In remote ages, these were, as may be supposed, executed without skill and applied without taste. But, in course of time, they began to make rapid advances in the fine arts, and evidences of their progress are to be met with in the superior workmanship and the refined taste exercised in their buildings, paintings, and sculptures. The Grecian artists did not content themselves with using such ornaments as were merely beautiful in themselves, but took care always to preserve in them the peculiar character of the building or other performance.

At first the Grecian architects confined themselves to ornamenting the exterior of their edifices, and it was not until a later period that a growing attachment to the luxurious prompted them to adorn their interiors likewise. The public temples and porticoes were the buildings which led the way in this respect; and the Gymnasia (γυμνάσιον), were rendered more than usually ornate in the inside.

The columns and their accessories probably owe their origin, among the Greeks, to the imitation of those parts which, in the most ancient temples (built with wood), were indispensable for the purpose of sustaining the edifice generally, and more particularly the cieling. When, subsequently, they came to use stone instead of wood, these parts were executed with a greater degree of care, they were invested with beautiful shapes and proportions, and agreeably diversified in outline by the variety of their members. In order to avoid the monotony which this quantity of surface naked and uniform would after all produce, they proceeded to embellish the different members or divisions with certain ornaments, the nature of which has been already described in our articles CAPITAL, COLUMN, ARCHITECTURE, &c. (which see). In process of time, the ancient, beautiful, and graceful simplicity, which had arrived at its highest perfection on the invention and adoption of the Grecian orders of architecture, gave way to the gradual innovations produced by wealth and luxury, and at length, among the magnificent Romans, the system of or-

nament was profusely introduced, and although, in the best instances, employed by the hand of refined taste, still it tended gradually to undermine the truest principles of the fine arts, and, in the sequel, effected a mighty and utter revolution both in their nature and application.

So long as the Romans did not possess, among their own artists, such as were capable of adorning their walls with paintings, sculptures, &c. equal to those which they had found in Greece, they transported thence into their own cities many of the *chefs d'œuvre* which had belonged to Grecian towns fallen into their power. They possessed a method of detaching from the walls large portions of these entire, which they fixed on the sides of the interiors of their own habitations, surrounding them with a border of stucco. Winckelmann, in his Essay on the Works of Art discovered at Herculaneum, states that he found several paintings detached from the walls, which they merely rested against, the owners of the mansions having probably intended to fix them had not their purpose and their life together been arrested by the inexorable hand of destiny. Engravings of these are to be found in the *Antiquités d'Herculanum*, fourth vol. pl. 41—44 (the Neapolitan edition). At length, however, the Roman artists themselves began to acquire reputation in this department, and under the reign of Augustus, the adorning the walls of chambers with representations of landscapes was particularly in vogue. Zodius, who flourished at this epoch, was, according to Pliny, one of the first practisers in this manner—namely, in painting on walls views of country-houses, of sea-ports, of forests, and of landscapes generally, more or less extensive. This taste continued to spread rapidly, and in the ruins of Herculaneum and Pompeii (see those words) numerous instances were discovered. Occasionally they varied these landscape-paintings by the introduction of columns, porticoes, halls, &c. but these columns are very dissimilar in their proportions to the actual specimens handed down to us from the sculptors of those times; they are rude and uncouth, and resemble more the construction of primeval times. Pliny, in a description of his villa entitled *Tusci*, speaks of a chamber upon the walls of which branches of trees had been painted with birds perched upon them. On the upper portion of the walls thus ornamented, just under the cieling, they made a cornice run round the whole room composed of lime mixed with powder of marble. They afforded this cornice but little projection, in order that its weight might not endanger its falling. In the rooms appropriated to winter residence, these cornices were left plain, in order that they might be cleaned with facility, when blackened by the smoke of the fire: in the summer apartments, on the contrary, and in others wherein fires were not used, they were richly ornamented.

It is incumbent on the architect to possess some general knowledge of the sister arts of painting and sculpture, in order that he may be enabled to direct the application of ornaments, both external and internal, about his buildings. It has been observed, with great justice, that in order to preserve harmony and consistency throughout the several relative parts of an edifice, one sole eye and mind should superintend and control the whole of the artists and workmen employed. Several palaces which could be mentioned, that have either been erected at different periods, or have been subjected to the *surveillance* of various individuals, afford in the discordant and inharmonious nature of their details striking and conclusive evidence of the truth of this remark; whilst many of the finest structures of Italy are known to owe their principal charm and excellence to the unity of design and of taste which was suffered to preside in their ordonnance and decoration.

We also apply the term ornament, or decoration, to those marks of distinction which characterize any given dignity. Thus, amongst the ancient Romans, the ornaments of the *grand ediles* were—the curule chair, the ivory staff, and the *toga pretexta:* they were preceded likewise by twelve lictors, with *fasces* (or rods) and axes. Under the emperors, the actual power of these officers was diminished; but their external pomp became even still more ostentatious. The *consuls* wore their *toga*, or robe, painted and embroidered; they used also a sword, and had their *fasces* bound with laurel. The signs of imperial dignity were—to have also borne before its possessor (the *imperator* or emperor) fire in a brazier, and rods bound with laurel; he wore purple, was crowned with a diadem, and had his image wrought upon the standards of the army. The ornaments, or marks of dignity, peculiar to the *pretor* were—six lictors with *fasces*, the *pretexta* which he carried into the Capitol the day of his installation, the curule chair placed on a tribune, or elevated place, the spear or lance which marked his jurisdiction, and the sword. The ap-

pointments of the senators consisted of the *laticlavius*, or tunic adorned with a large purple band, the black hose (which covered the foot and half the leg), adorned with a silver crescent, and, lastly, a distinguished place in all public ceremonies or spectacles. The *questors* had for their insignia the ivory staff and the curule chair. To those who had been decreed a triumph, the following ornaments were assigned:—the triumphal robe called *palmata;* this was worn over the toga called *picta*, which was of purple adorned with gold: a crown of laurel for the head, and a magnificent car, or chariot, drawn by four white horses, in which the victorious chief was conducted with pomp to the Capitol.

In the present day, the ornaments of royal or imperial power are much the same in all the European countries; in our own, the principal among them are:—the crown, the mantle of rich velvet trimmed with ermine, the ring, the sceptre, the globe, the sword, and the oil of consecration.

The following works will be found useful with respect both to the principles of ornament, in general, and to its various species in particular.—*Degli Ornamenti della Architettura civile secondo gli Antichi;* according to the *Vite de' più celebri Architetti*, p. 474, Rome, 1768, 8vo. the above treatise was written by Girol del Pozzo. —Nic. Goldmann, *Traité sur les Ornemens d'Architecture, qui sont l'Ouvrage de la Peinture et de la Sculpture*, Augsburgh, 1720, folio, with five plates. Schubler's *Architecture* of Sturm and Goldmann *augmented and improved, with a variety of Objects serving for the Decoration of the interior of Buildings*, Augsburgh, folio, with fifty-four plates. *La Supplication aux Orfèvres, Ciseleurs, Sculpteurs en Bois pour les Appartemens;* this work is attributed to Ch. Coquin, as well as another entitled *Lettre d'une Société d'Architectes*, first inserted in the *Mercure de France*, and republished in the *Recueil de quelques Pièces concernant les Arts*, Paris, 1757, 12mo. F. A. Krubsacius's *Reflections on the Origin, Progress, and Decline of Ornaments in the Fine Arts*, Leipsic, 1759 and 1773, 8vo. Moulin, *Essais sur l'Art de décorer les Théâtres*, Paris, 1760, 8vo. Luc. Voch, *On the Ornaments of Architecture, according to the Antique Taste adopted by the Moderns*, Augs. 1783, 8vo. with twenty-one plates. François de Scheyb, who treats of Grecian ornaments in the 13th chapter of the 2d vol. of his *Kæremon:* the 59th, 60th, and 61st chapters of the 10th part of the same author's *Orestrio* discourse of the ornaments of architecture as well as of the other arts of design, and also of grotesque ornaments. The 6th chapter of a German work, entitled *Researches on the Styles of Edifices*, Leipsic, 1788, 8vo. The 3d and 4th chapters of the 6th book of *Grand Livre des Peintres*, by Lairesse. *Treatise on Arabesques*, in the 10th No. of the *German Mercury* for 1789. C. L. Stieglitz, *Sur l'Empire des Grotesques et des Arabesques*, in the 40th vol. of *La Nouvelle Bibliothèque des Belles-Lettres*. The same author treats again of this subject in several passages of his *Archæologie de l'Architecture*. A. Riem, *On Arabesques*, in the periodical work of the Academy of Arts at Berlin, 1st vol. p. 276, 2d vol. p. 22 and 119. K. P. Moritz, *On the Ornaments of the Orders of Architecture*, *ibid.* 3d vol. p. 1. *Prolegomena of a Theory of Ornaments*, by the same author, Berlin, 1793, 8vo. Sulzer, in his *Theorie der Schænen Künstes*, at the word *Verzierung*.

Several artists have published designs for ornaments of different kinds. Polydore Caldara da Caravaggio, whose works have been engraved by Giov. Batt. Galestruzzi; several plates have also been engraved by Ch. Albert and others. Steph. Della Bella has published eight plates of friezes, leaves, and grotesques; sixteen of *Ornamenti di Fregi e Fogliani;* twenty-four of *Diversi capriccii;* twelve sheets of *Ornamenti o Grotesche, disegni varii d'ornati, intagliati dal Ciartres*, &c. L. Burnacci, several of whose ornaments and decorations have been engraved by Melch. Kussel. Balth. Bianchi, *Fregi d'Architettura*, forty-eight sheets, folio, 1645. Gaet. Brunetti, *Ornamenti*, twelve sheets, 4to. engraved by Vivares, and sixty sheets, 4to. engraved by Rogun and Fletcher. Dom. Santi, *Campi ornati d'Architettura*, intagliati da Dom. Mattioli, Bologna, 1695. Fil. Passarini, *Invenzioni d'Ornamenti d'Architettura, et d'intaglio diversi, utili ai Argentieri, Intagliatori, Ricamatori*, &c. Rome, 1698, folio. In the *Varie Opere* of Ferd. Bibiena, we find several designs of decorations and ornaments. Fr. Aquila, *Raccolta da Vasi diversi formati da illustri Artefici antichi, e di varie Targhe sopraposte alle Fabriche più insigni di Roma*, Rome, 1713, oblong-folio. Gaet. Chiaveri, *Ornamenti diversi di Porte e Finestre in Prospettiva*, Dres. 1743, folio. Giov. Giardini, *Promptuarium Artis Argentariæ, ex quo centum exquisito Studio inventis, delinentis ac Ære incisis Tabulis elegantissimæ ac innumeræ educi possunt novissimæ Ideæ*, Rome, 1750, 2 vols. folio. Carlo Antonini, *Manuale di Vari Ornamenti, tratti delle Fabriche e Fram. antichi*, Rome, 1777—1781, 4 vols.

4to. J. Catelle, *Livre de divers Ornemens pour Plafonds, Galeries*, &c. engraved by Poilly, 1640, 21 pl. in folio. Pineau, *Décorations pour toutes sortes de Chambres*, 36 pl. in folio. In M. de Heineker's *Dictionnaire des Artistes*, 2d vol. 459 and following pages, we find a numerous list of ornaments published by J. Berain. O. P. Cauvet, *Recueil d'Ornemens à l'Usager des jeunes Artistes qui se destinent à la Decoration des Batimens*, Paris, 1757, folio. *The Principles of drawing Ornaments made easy by proper Examples of Leaves for Mouldings, Capitals, Scrolls, Husks, Foliage*, &c. Chippendale, *Designs of the most useful and elegant household Furniture*, London, 1762, 200 plates in folio. P. Bourdon, *Livre d'Ornemens pour les Orfévres et les Jouailliers*, 1793. *Livre d'Ecrans Chinois et Bordures d'Ecrans; Deux Livres pour Principes d'Ornemens, Panneaux*, &c. Colambini's *Book of Vases*. Hipplewhite's *Designs for Household Furniture. Recueil de Décorations relatif à l'Ameublement*, Paris, folio; and many others.

With regard to the ornaments employed by the ancients, the reader may consult—*Le Antiche Camere delle Terme di Tito dis. intagl. e color.* da L. Miri, Rome, 1776, fol. *Description des Bains de Titus, gravée sous la direction de* M. Ponce, Paris, 1759, folio. *Collection des Peintures antiques qui ornoient les Palais, Thermes, Mausolées, Chambres sépulchrales des Empereurs Titus, Trajan, Hadrian, et Constantine*, engraved in 53 plates, Rome, 1782, folio. *Arabesques antiques des Bains de Livie et de la Villa Adrienne*, engraved by Ponce, Paris, 1789, folio, &c.

Ornamental Style. See the preceding article; also Style.

Ornatrix. [Lat.] *In archaiology.* A waiting maid, or slave, who was employed for the purpose of dressing her mistress's hair. This name is often met with in antique inscriptions. The collection of Gruter contains several of these inscriptions, wherein we read *ornatrix à tutulo*, namely, the arranger of the cap or bonnet entitled *tutulus: ornatrix auriclæ* for *auriculæ*, the fixer of the earrings: *ornatrix galeæ*, the slave who dressed the hair in the peculiar manner styled *galea*. We read, in an inscription published by Muratori, *ancilla ornatrix*;—in another *ornatrix Dianæ*, which may be familiarly rendered *hairdresser to the goddess Diana*; &c.

Ornithon. [ὀρνιθών, Gr.] *In archaiology.* A building constructed somewhat in the shape of a large pen or fold, the interior of which was divided into several compartments, for the reception and preservation of different kinds of fowls and birds, some of which were therein fatted for the use of the table, and others (such as birds of song, &c.) were set aside for purposes of amusement and luxury. Varro, in the 3d chapter of the 3d book of his work, entitled *De Re Rustica*, has treated somewhat at large on this subject; and information respecting it is likewise to be found in the work of a recent author, —namely, in the 19th p. of *The Villas of the Ancients illustrated*, by Castell. M. de Seguer was the author of a work, entitled *De Ornithone Varronis*; and Goiffon has published *Observations sur la Volière de Varron:* these two treatises have been republished by M. Schneider, at the end of his commentary on the 1st vol. of *Scriptores Rei Rusticæ.*

Orphanus. See Opal.

Orpheus. [ὀρφεὺς, Gr.] *In the mythology of painting and sculpture.* Great use has been made both by poets and artists of this half-fabulous personage. Indeed, the sister art of Music has afforded many fine subjects for the painter's brush and the sculptor's chisel, the principal of which we shall consequently take this opportunity of briefly mentioning.

Wonderful stories were related of several musicians of the earliest ages: as, for instance, of Amphion, who is said to have built the walls of Thebes only with the pleasant harmony of his musical instruments; for the sweetness of the tunes caused the stones to move, and place themselves in good order.

Arion was also admired for his skill in music: when sailing from Italy into Greece, the seamen resolved amongst themselves to cut his throat, that they might have his purse. But he requested of them the favour to suffer him to play once more with his harp before they dispatched him; upon which the dolphins, ravished to hear him, came in companies about the ship; and when Arion beheld them, he cast himself into the sea, hoping to meet there with more humanity than amongst the cruel mariners; nor was he mistaken, for one of these dolphins, taking the musician upon his back, carried him to Corinth, and was rewarded by the gods for this service with a place among the stars.

But the most famous of all these classical fables, and the most qualified to call forth the talents of the artist, is that of Orpheus, who was said to be a son of Apollo and Calliope. Of him it is reported that he caused his voice to agree so admirably well with his lute, that the rivers stopped to listen to him, that the

storms and tempests ceased, that the most savage animals came to him in companies to recreate themselves with this excellent harmony, and that the trees and rocks were seen to move at the sound.

The most beautiful piece of imagination, however, connected with the subject of Orpheus, is that of the return from the infernal regions of his beloved wife Eurydice. She having died suddenly of a wound received from a serpent, Orpheus resolved to recover her, or perish in the attempt. With his lyre in his hand, he entered the regions of Pluto, and gained admission into his palace. The king of hell was charmed with the melody of his strains, and at length granted him the favour to carry his wife again to earth, on condition that he would not look back on her until he had passed the extremest borders of the gloomy territory. Orpheus was already in sight of the upper regions of the air, when his impatient love causing him to turn his eyes back on his long-lost Eurydice, she vanished on the instant from his view, and was dragged back into hell, whither he was not permitted again to follow her.

There is a curious old story, which has given rise to a fine painting of Annibale Caracci (now in the National Gallery in Pall Mall) of a musical dispute between Apollo, and Pan the god of the mountains and shepherds. According to some versions, Midas, a king of Phrygia, but a mighty simple fellow, was appointed umpire of this controversy, and he giving the preference to Pan, Apollo, offended, bestowed on him an appropriate punishment by adorning him with the ears of an ass.

In all the representations of Orpheus, and there are many, he is constantly accompanied by his lyre.

Orpiment. [*auripigmentum*, Lat.] *In painting.* A bituminous mineral, composed of sulphur and arsenic, sometimes artificially produced, but also to be found native in the earth, and constituting one of the ores of arsenic. It is commonly found in shapeless masses, very seldom crystallized. There is a variety of this fossil, of a broad-flaked gold-coloured kind, which was well known among the ancients (as is plain from the description of it left us by Dioscorides), and is much esteemed at present by our artists. This is found in several places, as in the islands of the Archipelago, in the mines of Goffelaer, in Saxony, in some parts of Turkey and the East Indies, and in its utmost purity about Smyrna: this makes the finest of all yellows in painting. The small-flaked yellow kind, which is the common orpiment of the shops, is also a fine colour, though greatly inferior to the former.

Orpin. [Fr.] *In painting.* This substance, which is of various colours, such as a golden yellow, a pale yellow, a rose colour, yellow-green, and red, is however seldom made use of, in painting, on account of its virulent poisonous quality.

Orthography. [ὀρθὸς, right, and γράφω, to write.] The age of charters, as well as of various other monuments, is often detected by the orthography of the writing or inscription thereon; and on the other hand, these monuments have been regarded as authorities to settle the disputed orthography of certain words.

In architecture, the elevation of a building at any of its particular parts.

In geometry, this term is applied to the art of drawing or delineating the fore right plan of any object, and of expressing the heights or elevations of each part. It is denominated *orthography* from its determining things by perpendicular lines falling on the geometrical plane.

In perspective, orthography is the fore right side of any plane, *i. e.* the side or plane that lies parallel to a straight line, that may be imagined to pass through the outward convex points of the eyes continued to a convenient length.

Orthostade. [ὀρθὸς, upright, and ἵσταμαι, to stand.] *In ancient costume.* A long and ample tunic, thus denominated on account of its straight or upright folds. This tunic, like the *stola* of the Roman ladies, had sleeves covering the arms even down to the hand. Briseïs appears with a vestment of this kind, as will be seen in the first vol. and tenth plate of M. Millin's *Monumenti Inediti.*

Oscilla. [Lat. from *os*, *oris*, the countenance, and *cilleo*, to move.] *In archaiology.* A species of mask consecrated to Bacchus. Virgil makes mention of them in his Georgics. These kind of vizards are found often represented on ancient monuments. Among the gems whereon they have been engraved are those published by Lippert, in his *Dactiliothèque.* Spence, in his *Polymetis*, pl. 20, No. 2, has given one whereon we find engraven a tree with several *oscilla* suspended from it.

Ossuarium. [Lat. from *os*, *ossis*, a bone.] *In archaiology.* The vase or urn destined to enclose the ashes and the remains of the bones after the body had been consumed upon the funeral pile. Montfaucon (*Antiquité expliquée*, 1st part, vol. 5), has published, according to Fabretti, an urn upon which is inscribed *ossuarium.*

Osteology. [Gr. οστεὸν, a bone, *quod a* τάω, to make to stand, and λόγος, a discourse.] *In painting, drawing, and sculpture.* That part of anatomy which treats of the bones. See Anatomy.

Ostracias. [Gr. ὄστρακον, a bony substance or shell. *In gem sculpture.* Pliny speaks of a stone so called from its extreme hardness and resemblance in its surface to that of a shell. The fragments of this stone, according to him, were capable of being used wherewith to engrave other stones.

Outline. [*out* and *line.*] *In drawing,* &c. Contour. Line by which any figure is defined. Extremity.

Outre. [Fr.] *In all the arts.* Fantastical, exaggerated, or overstrained.

Oval. [Lat. *ovum,* an egg.] *In painting.* An oblong curvilinear figure, otherwise called *ellipsis.* However, the proper oval, or egg shape, differs considerably from that of the ellipsis, being an irregular figure, narrower at one end than at another: whereas the ellipsis, or mathematical oval, is equally broad at each end: though it must be owned, these two are commonly confounded together; even geometricians calling the oval a *false ellipsis.*

Ovation. [*ovatio,* Lat.] *In archaiology.* A lesser triumph allowed to commanders for victories obtained without bloodshedding. The show generally commenced at the Albanian hill, from which point the chief, accompanied by his retinue, made his entry into the city on foot, with many flutes or pipes sounding in concert as he passed along, and wearing a garland of myrtle as an emblem of peace. The term *ovation,* according to Servius, is derived from *ovis,* a sheep; because, on these occasions, the conqueror sacrificed a sheep, as in a triumph he sacrificed a bull. The senate, equestrians and principal plebeians assisted in this procession, which terminated at the Capitol, when rams were sacrificed to Jupiter. The first ovation was granted to Publius Posthumius, the consul, for his victory over the Sabines in the 253d year of Rome.

Ovile. [Lat. from *ovis,* a sheep.] *In archaiology.* The ancients designated thus a place in the *Campus Martius,* where the people assembled for the purpose of naming their magistrates. It probably received this name on account of the different divisions into which it was separated making it resemble a sheepfold. In remote times, this enclosure was formed by barriers of wood; but at a later period it was surrounded with porticoes, as we learn by the fourth book of the *Letters of Cicero to Atticus.*

Ovolo. [Italian.] *In architecture.* A round moulding, whose profile or sweep, in the Ionic and Composite capitals, is usually a quadrant of a circle, whence it is also commonly called the *quarter round.* It is generally cut with representations of eggs, arrow heads, &c.

P

Pacificator. [Lat. from *pax,* peace.] *In emblematical painting and sculpture.* The attitude of a person who makes peace, or any other act of grace, consisted, among the ancients, in the horizontal extension of the right arm, which formed a right angle with the breast, the hand being quite open, and all the fingers stretched out. They used this same attitude at other times to indicate a truce, and employed it likewise in the composition of any figure in the act of appeasing uproar or sedition. As this attitude was noble and imposing, we find it made use of in the statues of several emperors: that of Marcus Aurelius, in the Capitol, and that of Domitian, were thus composed.

Paduan Coins. *In numismatics.* Such are denominated those spurious medals fabricated with much care by J. Cauvin, surnamed *Il Padoano,* and by Bassiano. These spurious coins are copies of antiques, or, at least, of the antique style, and display, especially on their reverses, a profound knowledge of history. The Cabinet of Antiquities in the Royal Library at Paris possesses a beautiful series of Paduan medals.

Pæan. [Lat. from παιάν, Gr.] *In archaiology.* A song of rejoicing, sung, among the ancients, in honour of Apollo, and chiefly used on occasions of victory and triumph.

Pædagogus. [Lat. παδαγωγός, Gr. from πᾶις, a boy, and ἄγω, to lead.] *In archaiology.* The name of a slave, to whom the Greeks and Romans were in the habit of confiding the education, or, at least, the behaviour of their children. They were dressed after the fashion of barbarians, generally wearing a tunic with straight sleeves, and a kind of pantaloon which descended to their feet: sometimes they were decorated with the Phrygian cap, as

may be observed from several monuments, amongst which Millin cites the *basso-rilievo* representing the death of Niobe's children, and published by Winckelmann (See *Monumenti Inediti*, No. 89), and by Visconti (*Villa Pinciana*, stanza 1, No. 16). It may be here remarked, that the ancients appropriated the costume of nations then barbarian to every species of domestic servant.

PÆNULATI [Lat. from παινόλης, Gr.] *In archaiology.* Seneca applies this term to those slaves whose employment was to bear the litter, in consequence of their being clothed in a *pænula*, or sort of thick riding coat, made somewhat like a smock frock, which was often very richly embroidered.

PÆSTUM. *In the history of the arts.* Leucania was, in ancient times, one of the most flourishing divisions of Grecian Italy, and has been long comprised within the kingdom of Naples. It had at first for its principal town the celebrated Sybaris, and subsequently Pæstum, or, as it was called by the Greeks, ποσείδωνία, which name was changed to the former on the city falling into the hands of the Romans. The utmost taste for art seems to have reigned in this once famous town, and all which could in those days be imagined of ingenious, of delicate, or voluptuous, was to be found within its walls. The climate conspired to complete the charms and graces of the spot, and during the era of Augustus, Horace, Virgil, Propertius, and Ovid, each vied with the other in singing the praises of

"Pæstum's twice-blowing roses."

This place is now, and has been for many successive ages, a perfect solitude. Towards the year 930, it was sacked by the Saracens. Still, however, that rude people left standing abundant evidences of its former splendour and magnificence, and it was reserved for Robert Guiscard, nearly two centuries after, to destroy what the barbarians had spared. By the directions of this man, all the ancient edifices were demolished, the temples most of them razed to the ground, and their precious remains, such as beautiful columns of *verd antique*, &c. transported to Salerno, there to serve toward the construction of a church. From the ashes of the old town, however, arose a new one which was denominated Pesti, and which was not finally abandoned until 1580. Since that period, the ruins of the ancient city do not appear to have attracted notice until 1745. The first modern author who treated of them was the Baron Joseph Antonini, in his work on Leucania, published at Naples in 1745 and following years. The description which this writer has given of the ruins of Pæstum leave no room whatever to doubt but that he had actually visited them; and this being granted, what becomes of the story of the young Neapolitan painter, to whom, according to Grosley and others, the honour of their discovery (in 1755) is to be attributed? The first artist who measured and made drawings of them was, according to Millin, J. G. Soufflot, a celebrated architect of his day, who built the basilica of St. Genevieve, afterwards called the Pantheon. "These drawings," says Millin, "although executed in 1750, lay for a long time unused in the artist's portfolio, and were not published until 1764 at Paris, by M. Dumont, professor of architecture."

The ruins of the ancient town of Pæstum are situated in the gulf of Salerno, twenty-two leagues from Naples, and in a vast and mountainous plain. The precise extent of their antiquity is altogether baffling; in all probability, it stretched far beyond the conquest of the town by the Romans.

The circumference of the city, in form an angular oblong, which is contracted towards the west, is enclosed by thick walls, partly ruinous, but still lofty in many places, and their height varying from twelve to twenty-one feet. Substantial square towers flank each angle of the walls, and there are several other intermediate ones between these and the gates. There remained a few years ago one gate (towards the east), quite perfect.

These walls enclose a prodigious multitude of ruins, the principal of which are those of three temples, which were denominated by the discoverers the grand temple, the lesser temple, and the basilica. The latter differs from every other temple in existence, having nine columns in the front, with a central range down the middle of the cell, the use of which appears to have been to support the roof.

The situation of these central columns has led to many conjectures as to what purpose this singular edifice had been applied. Paoli designates it as a *basilica*, in which conjecture he is followed by Delagardette; but Major observes, with more probability, that it does not present the form of a basilica, because its portico is on the outside, whereas those described by Vitruvius were on the inside: nor can he suppose it to have been simply a portico, as portions of the wall of the cell are still

in existence. All its other parts, the odd number of columns in front excepted, and the beforementioned central row of columns, bear every other mark and characteristic of a temple.

Of the centre, or hypæthral temple, we have already spoken in another place. See ARCHITECTURE.

Mr. Forsyth, who visited this mysterious city with the feelings of a poet, says, that on entering its walls he felt all the religion of the place. "I stood," says this inspiring writer, "as on sacred ground. I stood amazed at the long obscurity of its mighty ruins." With regard to its great antiquity, however, he differs from other authors and antiquaries, and does not conclude that, because the Pæstum Doric differs in its proportions from that of the Parthenon, the Pæstan temples are consequently to be considered any older than the Athenian. The proportions of an order, he justly observes, are but matters of convention. They often vary in the same country, nay, in the same edifice; and surely a Phidias, working in the metropolis of Grecian art, with its two best architects, and the Pentelican quarry at his command, might well produce more pure elegance than contemporary or even later artists, who were confined to the ruder materials and taste of a remote colony. (FORSYTH's Italy, p. 312.)

The most authentic accounts of these antiquities are to be found in MAJOR's *Travels;* and in the *Magna Græcia* of WILKINS, who has dilated, with a true architectural feeling, on their drear ruins. The following works may also be consulted:

Vues et Détails de Pæstum, published by DUMONT, professor of architecture, Paris and London, 1764, 1767, and 1769, in folio. (The last edition contains also engravings and details respecting Herculaneum, and other antiquities, principally in the kingdom of Naples). *Sei vedute delle Ruine di Pesto*, da MORGHEN, Napoli, 1766, folio. *The Ruins of Pæstum, or Posidonia, Town of Magna Græcia, in the Kingdom of Naples, with four fine plates engraved by* J. MILLER, London, 1767, folio. *The Ruins of Pæstum, or Posidonia*, by Thomas MAJOR, 1768, folio. (A French translation of this book appeared at Paris soon after). *Différentes Vues de quelques Restes de très-grands Edifices qui subsistent encore dans le milieu de l'ancienne Ville de Pesto, autrement Posidonia, située dans la Lucanie*, by PIRANESI, folio. This collection, published at Rome, is complete and faithful. *Pæst. quod Posidoniam etiam dixere, rudera, seu Pæstanæ Dissertationes Italice et Latine, auctore patre* Paulo Antonio PAOLI, Rome, 1784, folio. This work also deserves to be distinguished. *Les Ruines de Pæstum ou Posidonia, ancienne Ville de la Grande Grèce à 22 lieues de Naples, dans le Golfe de Salerne, levées, mesurées, et dessinées sur les Lieux, en* 1793, par M. DELAGARDETTE, architecte, Paris, 1797. This work, together with that of Piranesi, is the best in point of illustration, that exists on the subject of Pæstum. In the *Chalcography* of FRANZETTI, at Rome, has appeared a fine collection of twenty-eight small views of different pieces of antiquity at Pæstum, engraved by MORELLI: it is entitled, *Raccolta degli antichi Monumenti esistenti nella Città di Pesto, e di alcune altre vedute appartenenti alla medesima Città.* There are also some remarks on the town and monuments of Pæstum to be found in the *Dissertations sur la Lucanie* of Baron Joseph ANTONINI, Naples, 1747, and following years. *Voyage en Sicilie et dans la Grande Grèce*, par RIEDESEL, Laus. 1773, 8vo. *Sicula*, by D'ORVILLE, Amst. 2 vols. 1764, folio. PANCRAZI, *Le antichità Siciliane spiegate*, Napol. 1751, folio. *Les Remarques sur l'Architecture*, by WINCKELMANN. *Le Voyage en Italie*, by LALANDE. GROSLEY, *Observations sur l'Italie et les Italiens, par deux Gentilshommes Suédois*, &c.

PAGE. [*paggio*, Ital. by contraction from *pædagogium*, Lat. or παίδιον, a little boy, Gr.] *In archaiology.* One of a troop of young boys, who were kept by the more opulent Greeks and Romans both for purposes of ostentation and of domestic employment. The term *pædagogium* was applied also to that part of the mansion wherein they were lodged. These boys were generally chosen from among the plebeian children distinguished for personal beauty. They are very frequently found depicted on vases, bassi rilievi, &c. Pages were commonly kept, in modern times, by barons, knights, ladies, &c. and figure greatly in the stories of romance. Their use is, at the present day, at least in Europe, restricted to the courts of princes.

PAGODA. [a corruption of *poutghad*, Persian, a house of idols.] *In architecture.* A name given by the East Indians to those temples devoted by them to the worship of their gods, and occasionally to the gods themselves. The pagoda usually consists of three parts.—The first is a vaulted roof, supported on stone or marble columns; it is adorned with images; and being open, all persons without distinction are permitted to enter it. The second part is

filled with grotesque and monstrous figures, and no person is allowed to enter therein but the bramins themselves. The third is a kind of chancel, in which the statue of the deity is placed, and which is shut up with a very strong gate.

We cannot afford room to go into detail on the several pagodas of different nations and their peculiar circumstances; and shall therefore content ourselves with offering the reader some account of the most interesting structures of this class in existence, which account is chiefly extracted from a paper in the Asiatic Researches, concerning the sculptures, &c. of Mavalipuram, a few miles north of Sadras, and known to seamen by the name of *the Seven Pagodas.*

The monuments which Mr. Chambers (who communicated the paper) describes, appear, he says, to be the ruins of some great city decayed many centuries ago. "They are situated close to the sea, between Covelong and Sadras, somewhat remote from the high road that leads to the different European settlements. And when visited in 1776, there was still a native village adjoining to them which retained the ancient name, and in which a number of *bramins* resided who seemed perfectly well acquainted with the subjects of most of the sculptures to be seen there. The rock, or rather hill of stone, on which great part of these works are executed, is one of the principal marks for mariners as they approach the coast, and to them the place is known by the name of the *Seven Pagodas*, possibly because the summits of the rock have presented them with that idea as they passed: but it must be confessed, that no aspect which the hill assumes as viewed on the shore, seems at all to authorize this notion; and there are circumstances, which will be mentioned in the sequel, that would lead one to suspect, that this name has arisen from some such number of pagodas that formerly stood here, and in time have been buried in the waves." The rock here mentioned, as it rises abruptly out of a level plain of great extent, naturally engrosses the attention of the eye. It consists chiefly of a single stone; and in its shape (which is singular and romantic), in a distant view, it has the appearance of an antique and lofty edifice. Works of imagery and sculpture crowd thicker upon the eye on a nearer approach, and at first sight at least favours the idea of a petrified town, which, through the credulity of travellers, has been believed to exist in various parts of the world. "Proceeding on by the foot of the hill on the side facing the sea, there is a pagoda rising out of the ground of one solid stone, about sixteen or eighteen feet high, which seems to have been cut upon the spot out of a detached rock that had been found of a proper size for that purpose. The top is arched, and the style of architecture according to which it is formed, different from any now used in those parts." Beyond this a numerous group of human figures in basso rilievo, considerably larger than life, attract attention. They represent considerable persons, and their exploits, many of which are now very indistinct through the injuries of time, assisted by the corroding nature of the sea air; others, while protected from that element, are as fresh as when recently finished.

The hill, which is at first of easy ascent, "is in other parts rendered more so, by very excellent steps cut out in several places, where the communication would be difficult or impracticable without them. A winding stair of this sort leads to a kind of temple cut out of the solid rock, with some figures of idols in high relief upon its walls, very well finished, and perfectly fresh, as it faces the west, and is therefore sheltered from the sea air." This temple our author conjectures to have been a place of worship appertaining to a palace; some remains of which still exist, and to which there is a passage from the temple by another flight of steps. This conjecture (for it is brought forward merely as such) is in some measure favoured by several ruins still remaining, and by the tradition of the bramins who inhabit the place. This finishes the objects "on that part of the upper surface of the hill, the ascent to which is on the north; but on descending from thence, you are led round the hill to the opposite side, in which there are steps cut from the bottom to a place near the summit, where is an excavation that seems to have been intended for a place of worship, and contains various sculptures of Hindoo deities. The most remarkable of these is a gigantic figure of *Vishnou*, asleep on a kind of bed, with a huge snake wound about in many coils by way of pillow for his head; and these figures, according to the manner of this place, are all of one piece hewn from the body of the rock." These works, however, although they are unquestionably stupendous, are, in our author's opinion, surpassed by others about a mile and a half to the southward of the hill. "They consist of two pagodas of about thirty feet long by twenty feet wide, and

about as many in height, cut out of the solid rock, and each consisting originally of one single stone. Near these also stand an elephant full as big as life, and a lion much larger than the natural size, but very well executed, each hewn also out of one stone. None of the pieces that have fallen off in cutting these extraordinary sculptures are now to be found near or any where in the neighbourhood of them, so that there is no means of ascertaining the degree of labour and time that has been spent upon them, nor the size of the rock or rocks from which they have been hewn; a circumstance which renders their appearance the more striking and singular. And though their situation is very near the seabeach, they have not suffered at all by the corrosive air of that element, which has provided them with a defence against itself by throwing up before them a high bank which completely shelters them. There is also great symmetry in their form, though that of the pagodas is different from the style of architecture according to which idol temples are now built in that country. The latter resembles the Egyptian; for the towers are always pyramidical, and the gates and roofs flat, and without arches; but these sculptures approach nearer to the Gothic taste, being surmounted by arched roofs or domes that are not semicircular, but composed of two segments of circles meeting in a point at top." Our author observes, that the lion in this group, as well as one on a stone couch in what he took to be a royal palace, are perfectly just representations of the true lion, and the natives there give them the name which is always understood to mean a lion in the Hindoo language, to wit, *sing*; but the figure which they have made to represent that animal in their idol temples for centuries past, though it bears the same appellation, is a distorted monster totally unlike the original; insomuch that it has from hence been supposed, that the lion was not anciently known in this country, and that *sing* was a name given to a monster that existed only in Hindoo romance. But it is plain that that animal was well known to the authors of these works, who in manners as well as arts seem to have differed much from the modern Hindoos.

"There are two circumstances attending these monuments which cannot but excite great curiosity, and on which future inquiries may possibly throw some light. One is, that on one of the pagodas last mentioned there is an inscription of a single line, in a character at present unknown to the Hindoos. It resembles neither the Deyva-nâgre, nor any of the various characters connected with or derived from it, which have come to the writer's knowledge from any part of Hindostan. Nor did it, at the time he viewed it, appear to correspond with any character, Asiatic or European, that is commonly known. He had not then, however, seen the alphabet of the Balic, the learned language of the Siamese, a sight of which has since raised in his mind a suspicion that there is a near affinity between them, if the character be not identically the same. But as these conjectures, after such a lapse of time, are somewhat vague, and the subject of them is perhaps yet within the reach of our researches, it is to be hoped that some method may be fallen upon of procuring an exact copy of this inscription.

"The other circumstance is, that though the outward form of the pagodas is complete, the ultimate design of them has manifestly not been accomplished, but seems to have been defeated by some extraordinary convulsion of nature. For the western side of the most northerly one is excavated to the depth of four or five feet, and a row of pillars left on the outside to support the roof; but here the work has been stopped, and a uniform rent of about four inches breadth has been made throughout the solid rock, and appears to extend to its foundations, which are probably at a prodigious depth below the surface of the ground. That this rent has happened since the work began, or while it was carrying on, cannot be doubted; for the marks of the mason's tools are perfectly visible in the excavated part on both sides of the rent, in such a manner as to show plainly that they have been divided by it. Nor is it reasonable to suppose, that such a work would ever have been designed or begun upon a rock that had previously been rent in two. Nothing less than an earthquake, and that a violent one, could apparently have produced such a fissure in the solid rock; and that this has been the case in point of fact, may be gathered from other circumstances, which it is necessary to mention in an account of this curious place. The great rock above described is at some small distance from the sea, perhaps fifty or one hundred yards, and in that space the Hindoo village before mentioned stood in 1776. But close to the sea are the remains of a pagoda built of brick, and dedicated to Sib, the greatest part of which has evidently been swallowed up by that element; for the door of the innermost apartment, in which the idol

is placed, and before which there are always two or three spacious courts surrounded with walls, is now washed by the waves, and the pillar used to discover the meridian at the time of founding the pagoda is seen standing at some distance in the sea. In the neighbourhood of this building there are some detached rocks, washed also by the waves, on which there appear sculptures, though now much worn and defaced. And the natives of the place declared to the writer of this account, that the more aged people among them remembered to have seen the tops of several pagodas far out in the sea, which being covered with copper (probably gilt) were particularly visible at sunrise, as their shining surface used then to reflect the sun's rays, but that now that effect was no longer produced, as the copper had since become incrusted with mould and verdigris."

From these circumstances our author conjectures, and we think reasonably, that the magnificent city, of which these appear to be part of the ruins, has been destroyed partly by an earthquake by which the rock was rent, and partly by a sudden inundation of the sea, occasioned by this commotion of the earth. The bramins give an account of this matter peculiar to themselves, filled with extravagance, fable, and folly; from which, however, with the assistance of ancient monuments, coins, and inscriptions, some probable conjectures, at least, if not important discoveries, may, it is hoped, be made on these subjects, which are far from being uninteresting.

PAINT. [from the French verb *peindre*, to paint.] The various colours used by the artist to represent any proposed object.

PAINTER. [same derivation as the former word.] The artist who represents the appearances of the objects of nature on a plane surface, with colours, as though they were in *rilievo*. According to the species to which each one is particularly attached we divide painters into different classes. We denominate him an *historical painter* who represents the actions of the Divinity or of men, such as belong either to sacred or profane history, to mythology, &c. The *landscape painter* is he who takes for his subjects the abundant beauties of external nature; the *portrait painter*, he whose business it is to portray an individual in such a manner as that the resemblance may strike the spectator at first sight. The *marine painter* takes for his subjects that extensive range which is connected with the various changes and effects of the sea; &c. &c.

We cannot do better in this place than transcribe a few of those inestimable directions which Sir Joshua Reynolds dispensed from his chair as President of the Royal Academy, and which should never be lost sight of by the student in art.

In the beginning of his Seventh Discourse, our illustrious countryman thus addresses the students before him:—"It has been my uniform endeavour, since I first addressed you from this place, to impress you strongly with one ruling idea. I wished you to be persuaded that success in your art depends almost entirely on your own industry; but the industry which I principally recommended is not the industry of the *hands*, but of the *mind*.

"As the art of painting is not a divine *gift*, so neither is it a mechanical *trade*. Its foundations are laid in solid science; and practice, though essential to perfection, can never attain that to which it aims unless it works under the direction of principle.

"Some writers on art carry this point too far, and suppose that such a body of universal and profound learning is requisite, that the very enumeration of its kinds is enough to frighten a beginner. Vitruvius, after going through the many accomplishments of nature, and the many acquirements of learning, necessary to an architect, proceeds with great gravity to assert, that he ought to be well skilled in the civil law, that he may not be cheated in the title of the ground he builds on. But, without such exaggeration, we may go so far as to assert that a painter stands in need of more knowledge than is to be picked off his pallet, or collected by looking on his model, whether it be in life or in picture. He can never be a great artist who is grossly illiterate.

"Every man whose business is description ought to be tolerably well acquainted with the poets in some language or other, that he may imbibe a poetical spirit, and enlarge his stock of ideas. He ought to acquire a habit of comparing and digesting his notions. He ought not to be wholly unacquainted with that part of philosophy which gives an insight into human nature, and relates to the manners, characters, passions, and affections. He ought to know *something* concerning the *mind*, as well as *a great deal* concerning the *body* of man. For this purpose, it is not necessary that he should go into such a compass of reading as must, by distracting his attention, disqualify him for the practical part of his profession, and make him sink the performer in the critic.

Reading, if it can be made the favourite recreation of his leisure hours, will improve and enlarge his mind, without retarding his actual industry. What such partial and desultory reading cannot afford may be supplied by the conversation of learned and ingenious men, which is the best of all substitutes for those who have not the means or opportunities of deep study. There are many such men in every age; and they will be pleased with communicating their ideas to artists, when they see them curious and docile, if they are treated with that respect and deference which is so justly their due."

Again, in the course of his second Lecture, the same great authority observes:—"Dividing the study of painting into three distinct periods, I shall describe the first of them as confined to the rudiments; including a facility of drawing any object that presents itself, a tolerable readiness in the management of colours, and an acquaintance with the most simple and obvious rules of composition.

"This first degree of proficiency is, in painting, what grammar is in literature, a general preparation for whatever species of the art the student may afterwards choose for his more particular application. The power of drawing, modelling, and using colours, is very properly called the *language* of the art.

"When the artist is once enabled to express himself with some degree of correctness, he must then endeavour to collect subjects for expression; to amass a stock of ideas, to be combined and varied as occasion may require. He is now in the second period of study, in which his business is to learn all that has been known and done before his own time. Having hitherto received instructions from a particular master, he is now to consider the art itself as his master. He must extend his capacity to more sublime and general instructions. Those perfections which lie scattered among various masters are now united in one general idea, which is henceforth to regulate his taste and enlarge his imagination. With a variety of models thus before him, he will avoid that narrowness and poverty of conception which attends a bigoted admiration of a single master, and will cease to follow any favourite when *he* ceases to excel. This period is, however, still a time of subjection and discipline. Though the student will not resign himself blindly to any single authority, when he may have the advantage of consulting many, he must still be afraid of trusting his own judgment, and of deviating into any track where he cannot find the footsteps of some former master.

"The third and last period emancipates the student from subjection to any authority but what he shall himself judge to be supported by reason. Confiding now in his own judgment, he will consider and separate those different principles to which different modes of beauty owe their original. In the former period he sought only to know and combine excellence, wherever it was to be found, into one idea of perfection: in this he learns (what requires the most attentive survey, and the most subtle disquisition), to discriminate perfections that are incompatible with each other.

"He is from this time to regard himself as holding the same rank with those masters whom he before obeyed as teachers, and as exercising a sort of sovereignty over those rules which hitherto restrained him. Comparing now no longer the performances of art with each other, but examining the art itself by the standard of nature, he corrects what is erroneous, supplies what is scanty, and adds by his own observation what the industry of his predecessors may have yet left wanting to perfection. Having well established his judgment and stored his memory, he may now without fear try the power of his imagination. The mind that has been thus disciplined may be indulged in the warmest enthusiasm, and venture to play on the borders of the wildest extravagance. The habitual dignity which long converse with the greatest minds has imparted to him will display itself in all his attempts; and he will stand among his instructors, not as an imitator but a rival."

We will not weaken, by any additional remarks of our own, the force of these admirable precepts; although the subject is one on which we might with pleasure expatiate. It is our purpose to give the comprehensive, critical, and descriptive list of modern painters communicated by the late ingenious Mr. Malone, from the papers of his friend, the celebrated poet Gray, a catalogue which we are quite certain cannot fail to be highly acceptable, both on account of its interest and utility, to all our readers; and we will precede this by a brief notice of the great names which have been handed down to us as belonging to famous painters of antiquity.

The first picture of which any mention is made by ancient writers is the *Battle of the Magnetes*, in Lydia, which was said

to have been executed by Bularchus, in the eighteenth olympiad. This picture was purchased with its weight in gold by Candaules, king of Lydia. There seems to have been a great gap or chasm in the history of painting after the time of Bularchus; and the next allusion to the art appears to be made by Anacreon, who, to express the abilities of any successful painter, said, "he is sovereign in the art which they cultivate at Rhodes;" hence we learn that the art must have flourished at Rhodes in that era, namely, 500 years before Christ. Phidias, the celebrated sculptor, is also cited by Pliny as eminent in the sister art of painting, and he flourished 445 years before our era. The brother of this illustrious ancient, Panænus (or, according to others Pannæus), acquired great reputation as a painter. He represented, in the temple of Jupiter Olympius, the subject of Atlas supporting the heaven and earth, and Hercules offering to relieve him of his burden; and another of Greece, and Salamin (an island in the neighbourhood of Athens), personified; together with many other pictures, the most famous of which was the *Battle of Marathon*, wherein, according to Pliny, the portraits of several generals, such as Miltiades, Callimachus, &c. might be recognised. We may observe that, even at this early period, prizes were contended for amongst the painters, Panænus having disputed, both at Corinth and at Delphos, with Timagoras of Chalcis.

Polygnotus of Thasos was a contemporary of Panænus, and is reported to have made great progress in his art. "He was the first," says Pliny, "who painted females with splendid vestments, who gave them for head-dresses mitres of different colours, and who, in a word, disentangled himself from the hard style of his predecessors." Mycon was his contemporary and partner in the works which adorned the Pœcile at Athens. After Mycon we proceed to mention Dionysius of Colophon, in whose works, according to Ælianus, were to be found many of the excellences of Polygnotus, such as choice of attitudes, flow of draperies, &c. but less grandeur of imagination. In the ninetieth olympiad we find mention made of Aglaophon, Cephissodorus, Phryllus, Evenor, &c. but it was not until the ninety-fourth olympiad that the art of painting among the ancients appears to have reached its blaze of perfection. Then ensued a list of celebrated artists, at the head of whom stands Apollodorus of Athens, who, according to Plutarch, acquired the knowledge of chiaroscuro. Zeuxis of Heraclea, who lived four centuries before Christ, followed up what Apollodorus began. The chief talent of this artist is said to have existed in the expression of the ideal, and above all in the representation of females. Parrhasius of Ephesus was the friend and rival of Zeuxis, and the disciple of Evenor, before mentioned. Seneca says of this artist, that wishing to represent a *Prometheus* with the greatest truth, he put a slave to the torture for the purpose of studying the bodily convulsions thereby produced. Junius, in his work on Ancient Painting, repeats the same anecdote in the words of Seneca: but this detestable atrocity having been elsewhere attributed to Polygnotus, and being again found in the memoirs of Apelles, humanity is prompted to hope that it may be altogether a fabrication. Rather than that such an anecdote should be true, we would, however great our enthusiasm, consent to forfeit the pleasures arising from the art altogether. Next in our list comes Timanthes of Sicyone, eminent for his inventive faculty, and after him Eupompus, also of Sicyone, and who obtained high reputation. Theon of Samos was distinguished by the singularity and wildness of his conceptions. Aristides of Thebes, and Echion (an artist mentioned by Cicero), were the immediate precursors of the greatest master whose works are said to have thrown lustre on the art of painting, as practised by the ancients—Apelles, in praise of whom the authors who lived whilst his performances were still extant, have exhausted all their terms of panegyric. This painter was the contemporary and favourite of Alexander the Great, and appears to have been able to take more freedoms with that haughty conqueror than perhaps any one else. There is a curious incident related in illustration of this. The monarch having one day expressed himself, whilst in the painting chamber of Apelles, rather ignorantly with regard to the principles of art, the painter counselled him, that he would do wiser to be silent, and not give the young lads who ground his colours occasion to laugh at the great Alexander! It is added, much to the credit of the king, that he bore this implied rebuke patiently.

Apelles is reported to have evinced, in his pictures, the utmost simplicity, with the most consummate grace; and when we reflect on the splendid achievements of architecture and sculpture in his era, we shall know how to appreciate the sense which the ancients had of these qualities. The paintings of this artist referred

many of them (perhaps most), to the exploits of his master, Alexander. PROTOGENES of Rhodes was the contemporary of Apelles, and PERSEUS, the pupil of that great master. EUPHRANOR came shortly after, and succeeded in almost all the arts of design. ANTIDOTUS was his disciple, and he again had for his the celebrated NICIAS.

The Roman painters make but a poor show after this brilliant enumeration of Grecian artists. The most ancient paintings known in Rome were indeed executed by Etruscan artists, and in later times they seem rather to have been ambitious of removing the *chefs-d'œuvre* of art from conquered Grecian provinces than of cultivating it among themselves. Their national pride might have conduced to this, which taught them to consider the peaceful arts as almost essentially plebeian. As a proof of the rarity of the practice of painting among them during the consulate, may be adduced the fact that Fabius, who painted (indifferently, it may be concluded, since Pliny does not enlarge on it), the temple of Salus, on the Quirinal Mount, was thenceforward denominated *Pictor* (the painter), this cognomen descending to his offspring; and that this was not an epithet given by way of *laudatory* distinction is evident from a passage of Cicero, in the first book of his *Tusculan Dissertations*. A few other names follow this artist's; but none of much notoriety. Turpilius had some fame in his day, and Pliny says of him that he painted with his left hand. Arellius flourished at Rome a short time before the reign of Augustus. This artist is gravely reproached by Pliny for painting goddesses after the objects of his own private amours. Under the Augustan reign we find Marcus Ludius, a landscape and marine painter, &c. The mania of Nero to be considered a painter infected, as might be supposed, several members of his court, but the muse seems to have been inexorable to their addresses. Under Vespasian, Cornelius Pinus and Accius Priscus painted the temples of Virtue and of Honour. According to Pliny, the latter approached nearest to the manner of the Grecian artists.

In our next article (to which the reader is referred), we shall give a summary of the different eras, manners, &c. of the art of PAINTING, and now proceed to the sort of *Catalogue Raisonnée* of modern painters (to the beginning of the last century), before alluded to, in which the reader will find the name of each artist, the master he studied under, the species of art he obtained fame in, the year of his death, his age, and a brief mention of his chief claim or claims to notice.

Names.	Studied under.	Painted.	Died	Age.	Excelled in.
Giovanni Cimabue	certain Greeks.....	History	1300	60	first revived Painting.
Andrea Taffi	Apollonius, a Greek .	History	1294	81	revived Music.
Giotti	Cimabue	History	1336	60	quitted the stiff manner of the Greeks.
Buonamico Buffalmacco	Andrea Taffi	History	1340	78	
Ambrogio Lorenzetti...	Giotto	History	1350	83	
Pietro Cavallini.....	Giotto	History	1364	85	
Simon Memmi.....	Giotto	Portraits.....	1345	60	
Andrea Orgagna.....	imitated Giotto	History	1389	60	
Tomaso Giottino	imitated Giotto	History	1556	32	
Paolo Uccello	Antonio Venetiano ..	Birds, some History	1432	83	first who studied perspective.
Massolino.....	Lorenzo Ghiberti and Gher. Starnina	History	1418	37	gave more grace to his figures and drapery.
Masaccio	Massolino	History	1443	24	
Fra. Giov. Angelico da Fiesole	Giottino	Hist.Miniatures	1455	68	
Antonella da Messina ..	John Van Eyck	History	1475	49	introduced oil Painting into Italy.
Fra. Filippo Lippi	Masaccio	History	1488	69	began to paint figures larger than life.
Andrea del Castagno, detto Degl' Impiccati	Domenico Venetiano.	History	1480	71	painted in oil first at Florence.
Gentile del Fabriano...	Giovanni da Fiesole..	History	1412	80	
Giacomo Bellini.....	Gentile del Fabriano .	History	1470		
Gentile Bellini }	Giacomo their father	History	1501	80	
Giovanni Bellini }		History	1512	90	
Cosmo Rosselli.....	.....	History	1484	68	
Domenico Ghirlandaio .	Alessand. Baldovinetti	History	1493	44	lively colouring, genteel designing, and good airs.
Andrea Verocchio.....	Giacomo Squarcione .	History	1488	56	observation of perspective.
Andrea Mantegna	.....	History	1517	66	
Filippo Lippi.....	Fra. Philippo his father, and Sandro Boticelli	History	1505	69	
Pietro Perugino.....	Andrea Verocchio...	History	1524	78	
Bernardino Pinturicchio	Pietro Perugino	History	1513	59	
Francesco Fraucia.....	Marco Zoppo	History	1518	68	first considerable Master of the Bolognese School.

PAINTERS.

Names.	Studied under.	Painted.	Died	Aged	Excelled in.
Bartolomeo Ramenghi, detto Il Bagnacavallo	Francesco Francia ...	History	1541	48	soft and flesby colouring.
Innocenzo Francuzzi, detto da Imola	Francesco Francia ...	History	....	..	correct drawing.
Francesco Turbido, detto Il Mauro	Giorgione.	Portraits.....	1521	81	
Luca Signorelli	Piet. della Francesca	History	1521	82	
Lionardo da Vinci.	.....	Hist. and Port.	1517	75	exquisite designing.
Giorgio Giorgione	imitated Lionardo's manner	History & Portraits	1511	33	management of the clair-obscure, and colouring.
Antonio da Correggio ..		History & Portraits	1534	49	divine colouring and morbidezza of his flesh; angelical grace and joyous airs of his figures, and clair-obscure.
Mariotto Albertinelli ..	Cosmo Roselli..	History	1520	45	
Baccio, detto Fra. Bartolomeo di S. Marco	Cosmo Roselli	History	1517	48	
Pietro di Cosimo	Cosmo Roselli	Grotes.&monst	1521	80	
Raphaellino del Garbo	Filippo Lippi	History	1529	58	
Michel Angiolo Buonaroti	DomenicoGhirlandaio	History	1564	90	great correctness of design, grand and terrible subjects, profound knowledge of the anatomical part.
Raffaelle Sanzio d'Urbino	Pietro Perugino: corrected his manner upon seeing the works of Lionardo da Vinci & Michael Angelo	History & Portraits	1520	37	in every part of painting, but chiefly in the thought, composition, expression, and drawing.
Titiano Vecelli	Giovanni Bellini	History & Portraits	1576	99	the clair-obscure and all the beauties of colouring.
Domenico Puligo.....	DomenicoGhirlandaio	History	1525	52	
Timoteo Urbino.	Raffaelle	History	1524	54	the same as his Master.
Vicenzo da San Geminiano	Raffaelle.....	History	1527	52	
Lorenzo di Credi	Andrea Verocchio, imitated Lionardo da Vinci	History	1530		
Balthazar Peruzzi	.....	Hist. buildings	1536	55	
GiovanniFrancescoPeni, detto il Fattore	Raffaelle.....	History	1528	40	good imitation of his Master and great dispatch.
Giulio Romano.....	Raffaelle.....	History	1546	54	Vivid and poetical fancy, and powerful thought.
Peligrino di Modena ..	Raffaelle.....	History	1538		
Pierino Buonacorvi, detto Perin del Vago	Raffaelle.....	History	1547	47	
Giovanni da Udina	Raffaelle.....	Grotesques	1564	70	animals, flowers, and fruits.
Andrea del Sarto.....	Pietro di Cosimo	History, Portraits	1530	42	natural and graceful airs, and correct drawing; a bright manner of colouring.
Francia Bigio	Mariotto Albertinelli	History	....	41	painted in company with and like Andrea.
Sebastiano, detto Fradel Piombo	Giov. Bellini; Il Giorgione, M. Angelo	History, Portraits	1547	62	painted in the strong and correct manner of this last, and coloured better.
Orazio Sammachini ...	Il Bagnacavallo, Innocenzo d'Imola	History	1577	45	
Lorenzetto Sabattini ...	the same.....	History.			
Prospero Fontana	the same.....	History, Portr.			
Lavinia Fontana	Prospero her father ..	History, Portr.	1602	50	
Pelestrino Tibaldi	Il Bagnacavallo, Innocenzo d'Imola	History	1592	70	a strong Michael Angelo manner.
Primaticcio, detto Il Bologna	the same; Giulio Romano	History	1570	80	genteelness and strenuous imagination.
Nicolo Bolognese, detto Messer Nicolo	Primaticcio	History	1572	60	
Il Dosso.....	Lorenzo Costa, Titian	History, Lands.			
Bernazzano da Milano .	.....	Animals, landscape,& fruits	1550		
Giov. Martino da Udina	Giov. Bellini.....	History	1564	70	
Peligrino da san Daniele	the same.....	History.			
Giov. Ant. Regillo, detto Licinio da Pordenone	Giorgione.....	History, Portraits	1540	56	fine colouring.
Girolamo de Trevigi ...	.....	Hist., buildings	1544	36	
Polidoro da Caravaggio	Raffaelle.....	History	1543	51	the correctness of design and imitation of the antique chiefly in chiaroscuro.
Il Maturino	Raffaelle.....	History	1527	37	the same; they always painted together.
Francesco Mazzuolo, detto Il Parmegiano	imitated Raffaelle....	History	1540	36	great delicacy and genteelness of drawing.
Girolamo Mezzuoli	Francesco, his cousin	History	....	..	always imitated his Master.
Giacomo Palma, detto Il Vecchio	Titian and others	History, Portr.	1596	48	warm and mellow tints.
Lorenzo Lotto	imitated Bellini and Giorgione	History, Portr.	1544	56	
Francesco Monsignori..	Bellini	Portraits.....	1549	64	

Names.	Studied under.	Painted.	Died	Age.	Excelled in.
Domenico Beccafumio Meccarino	imitated Pietro Perugino	History	1549	65	
Giacomo Pontormo....	Lionardo da Vinci, Albertinelli, Andrea del Sarto	History	1558	65	
Girolamo Genga	Pietro Perugino.....	History	1551	75	
Giov. Antonio da Verzelli, detto Il Sodoma	....	History	1554		
Bastiano Aristotile	.....	History	1551	70	
Benvenuto Garofalo ...	Baldini, Lorenzo Costa	History	1559	78	like Raffaelle.
Girolami da Carpi.	Garofalo, he imitated Coreggio	History	1556	55	
Giov. Francesco Bezzi detto Il Nesadella	Pelegrino Tibaldi....	History	1571		
Ercole Procacciui.....	the same.....	History.			
Bartolomeo & tre figli } Passerotti	the same.....	History.			
Francesco Salviati	Andrea del Sarto....	History	1563	54	
Giorgio Vasari	the same.....	History, Portr.	1584	68	
Daniel Ricciarelli, detto da Volterra	Il Sodoma; Baldasar Peruzzi	History	1566	57	strong sense of character.
Taddeo Zucchero.....	studied Raffaelle	History, Portr.	1566	37	
Frederico Zucchero....	.....	History, Portr.	1609	66	painted with his brother.
Bartolomeo Cesi	Il Nosadella	History	....	79	
Dionigi Calvart	Prospero Fontana....	History	1619	54	
John of Bruges.....	Hubert Van Eyck....	History, Portr.	1470	..	said to have invented Oil Painting.
Albert Durer.....	Hupse Martin	History, Portr.	1528	57	
Quintin Matsys, called the Smith of Antwerp	.....	History, Portr.	1529	69	Nature, high finishing.
Lucas Jacob, called Luca d'Olianda	Cornelius Engelbert..	History, Portr.	1533		
Peter Brueghel, called Old Brueghel	Peter Koek.....	.....	1570	60	
John Holben, called Hans Holben	.....	History, Portr.	1444	46	great Nature, extreme finishing.
Roger Vandensyde	John Van Eyck.....	History.			
John Schorel	Jacob Cornil	History	1562	67	
Matthias Cock	.....	Landscape	1465	65	
Martin Heemskirke....	John Schorel.....	Droll figures ..	1754	76	
François Floris, called Franc-Flore	Lambart de Liege ..	History	1570	50	
Francesco Vecelli	Titian, his brother ...	Portraits.....	1579	66	
Orazio Vecelli	Titian, his father	History, Portr.			
Nadalino di Murano ...	Titian	Portraits.....	1588	75	
Damiano Mazza.....	Titian	History, Portr.			
Girolamo di Titiano...	Titian	History, Portr.	....	..	colouring.
Paris Bordone	Titian	History, Portr.			
Andrea Schiavone.....	Titian	History	1582	60	
Alessandro Bonvincino, detto Il Moretto	Titian, imitated Raffaelle	History	1564	50	
Girolamo Romanino...	Titian	History	1567	63	
Il Muttano.....	Titian, Tad. Zucchero	Landsc. Portr.	1590	62	
Pirro Ligorio.....	Giulio Romano.....	Antique monuments and buildings	1573	80	
Dom. Giulio Clovio...	Giulio Romano.....	Miniature, History	1578	80	chaste and genteel colouring, somewhat of M. Ang. in the drawing.
Il Bronzino, Angelo-Allori	Giacomo Pontormo..	History, Portr.	1580	69	
Allessandro Allori	Bronzino, his uncle ..	History	1607	72	
Giacomo Sementi	Dionigi Calvart.....	History	1625	45	
Marcello Venusto.....	Perin del Vaga.....	History	1576	61	
Marco da Faenza.....	.....	History.			
Girolamo da Sermonetta	Perin del Vaga.....	History	1550	46	
Battista Naldino	Il Bronzino	History.			
Nicolo del Pomerancio	.....	History	1626	74	
Jean Cousin	.....	History	1589	..	commonly upon glass.
Michael Coxis	Van Orlay, Raffaelle.	History	1592	95	
John Bol	.....	Miniat. Landsc.	1593	59	
Peter Porbus.....	.....	.....	1583	73	
Antony More	John Schorel.....	Portraits, Hist.	1575	56	
George Hoefnaghel	.....	Views of Cities, Landscape	1600		
Camillo Procaccini....	Ercole, his father; Prospero Fontana	History	1626	80	a dark, strong, expressive manner.
Giulio Cesare Procaccini	Ercole, his father; Prospero Fontana	History	1626	78	a dark, strong, expressive manner.
Jude Indocus Van-Winghen	studied in Italy.....	History	1603	62	
John Strada	studied in Italy.....	Battles, Hunting	1604	68	
Bartholomew Sprangher	.....	History	1623	77	
Michael John Miervelt	Ant. Blockland	Portraits.....	1641	73	
Paolo Cagliari, detto Paul Veronese	Antonio Badiglio	History, Portraits	1588	58	rich and noble composition; fine warm colouring.

Names.	Studied under.	Painted.	Died	Age.	Excelled in.
Carlo Cagliari	Paolo, his father	History, Portr.	1596	26	imitated his father's manner.
Benedetto Cagliari	the same.....	the same.....	1598	60	the same.
Gabrielle Cagliari	the same.....	the same.....	1631	63	the same.
Battista Zelotti.....	Ant. Badiglio, worked with Paul Veronese	History, chiefly in Fresco.	1592	60	
Giacomo da Ponte, detto Il Bassano	Francesco, his father, Bonifacio Venetiano, imitated Titian	Rustic figures, Animals, Portraits, History	1592	82	much Nature, and fine colouring.
Francesco Bassano	Giacomo, his father..	the same.....	1594	84	imitated his father's manner, and copied his pictures.
Leandro Bassano	the same.....	the same.....	1623	65	the same.
Giambattista Bassano..	the same.....	the same.....	1613	60	the same.
Girolamo Bassano	the same.....	the same.....	1622	62	the same.
Giacomo Robusti, detto Il Tintoretto	Titian, in his drawing imitated Michael Angelo	History, Portraits	1594	82	the boldness and softness of his pencil; variety and correctness of design; seldom finished.
Marietto Tintoretto	Tintoret, her father ..	Portraits.....	1590	30	
Paul Franceschi.....	Tintoret	Landscape	1596	56	
Martin de Vos	Tintoret	Landscape	1603	84	
John Rothenamer	Tintoret	History	1606	42	designed after Tintoret's manner.
Paolo Farinato.....	Antonio Badiglio	History	1606	84	
Marco Vecelli	Titian, his uncle	.....	1611	66	
Livio Agresti.....	Perin del Vaga.....	History	1580		
Marco da Sienna.....	Dan. Volterra.....	History	1567	57	
Giacomo Rocca	Dan. Volterra.....	History.			
Frederico Barocci.....	studied Raffaelle	History, Portr.	1612	84	fine genteel drawing.
Il Cavaliero Francesco Vanni	Fred. Baroccio	History	1615	51	correct design and agreeable colouring.
Michael Angelo Amerigi, detto Il Caravaggi	Cav. Apino	History, humorous figures	1609	40	a strong and close imitation of Nature, but without choice; exquisite colouring.
Lodovico Caracci.....	Prospero Fontana....	History	1619	64	exquisite design; noble and proper composition; strong and harmonious colouring.
Agostino Caracci	Ludovico, his cousin .	History, Portrait, Landsc.	1602	44	similarly accomplished.
Annibale Caracci	Ludovico, his cousin .	History, Portraits, Landsc.	1609	49	similarly accomplished.
Domenico Zampieri, detto Il Domenichino	the Caracci.....	History, Portraits	1641	60	correct design, strong and moving expression.
Guido Reni	Dionigi Calvart, the Caracci	History, Portraits	1642	68	divine and graceful airs and attitudes, gay and lightsome colouring.
Cav. Giov. Lanfranco..	the Caracci.....	History	1647	66	great force and *fulgore*, chiefly in fresco.
Francesco Albani.....	Dionigi Calvart, the Caracci	History	1660	82	genteel poetical fancy, beautiful airy colouring, his Nymphs and Boys are most admired.
Lucio Massari	the Caracci	History	1633	64	
Sisto Badalocchio	Annibal Caracci	History.			
Antonio Caracci.	Annibal, his uncle ...	History	1618	35	
Giuseppe Pini, detto Cavalier Arpino	Raffaelle da Rheggio.	History	1640	80	the *furia* and force of his composition.
Il Paduano	.....	Portraits.			
Il Cigoli.....	Andrea del Sarto	History	1613	54	
Domenico Feti.....	Cigoli	History	1624	35	
Cherubino Alberti	.....	History	1615	63	
Cavaliere Passignano ..	Frederic Zucchero ...	History	1638	80	
Orazio Gentileschi	Aurelio Lomi.....	History	1647	84	
Filippo d'Angeli, detto Il Napolitano	.....	Landscape	1640	40	
Paul Brill	after Titian and Annibale	Landscape	1626	72	
Matthew Brill	.....	Landscape	1584	44	worked with Paul, his brother.
Pietro Paolo Gobbo ...	.....	Fruit, Landsca.	1640	60	
Il Viola	Annibal Caracci	Landscape	1622	50	
Roland Saveri	imitated Paul Brill ..	Landscape	1639	63	much finishing, but dry.
Bartolomeo Manfredi ..	M. Ang. Caravaggio .	History.			
Carlo Saracino	imitated Caravaggio..	History	1625	40	
Il Valentino	M. Ang. Caravaggio .	History	1632	32	
Giuseppe Ribera, detto Lo Spagnoletto	M. Ang. Caravaggio .	History	1656	67	a dark strong manner; dismal and cruel subjects.
John Momper.....	studied Nature	Landscape.			
Hen. Cornelius Wroon, or Vroon	Corn. Henrickson ...	Seaports, Ships			
Agostino Tassi	Paul Brill	Ships, Tempests, Landscapes, Fruit, Perspectives.			
Fra. Matteo Zaccolino .	.....	Perspective ...	1630	40	
Antonio Tempesta	John Strada	Animals, Battles, Huntings	1630	75	
Octavius Van Veen, called Otho Vænius	.....	History	1634	78	

PAINTERS.

Names.	Studied under.	Painted.	Died	Age	Excelled in.
Jean Le Clerc	Carlo Saracino	History	1633		
Simon Vouet	Laurent, his father	History, Portr.	1641	59	
Peter Neefs	Henry Steinwick	Perspective	1651	85	
Henry Steinwick	John De Vries	Buildings, Places illuminated by fire and candles	1693	53	great skill and beauty in his particular walk of art.
Theodore Rombouts	Abraham Jansens	Low life	1640	43	
Gerard Segres	Abraham Jansens		1651	62	imitated M. A. Caravaggio.
Sir Peter Paul Rubens	Otho Vænius	History, Portraits, Landscape	1641	63	admirable colouring; great magnificence and harmony of composition; a gay and lightsome manner.
Sir Antony Vandyck	Rubens	Portraits, History	1641	42	his Master's excellences with more grace and correctness.
Rembrandt		History, Portraits, Low life	1674	68	great knowledge and execution of the clair-obscure; high finishing, sometimes a very bold pencil and distinct colouring; vast Nature.
Cornelius Polembourg	Abraham Bloemart	Miniature, Landscape, with figures	1669	74	very finished execution.
John Brueghel, called Velvet Brueghel	Old Brueghel, his father	Little Landsca. with figures, animals, and flowers	1625	65	extreme neatness and finishing.
Moses, called the Little	Corn. Polembourg	Small Landsca. with figures	1650		
F. Dan Legres	Young Brueghel	Flowers	1666	70	
Gasper Craes	Coxis		1669	84	
Bartholomew Briemberg	studied at Rome	Landscape	1659	40	
John Asselyn, called Little John	Esaias Vander Velde	Landscape	1660	50	
Francis Snyders	painted with Rubens	Animals, dead and alive	1657	78	great truth and brilliant execution.
Ert Veest		Seafights, Tempests	1670		
Lewis Cousin			1670		
Philip Vauvremans	John Wynants		1668	48	
Gerard Dow	Rembrandt	Little figures	1474	61	
Pietro Francesco Mola	Albani, Cav. Arpino	History	1666	56	strong painting.
Giov. Battista Mola	Albani	Hist. Landsc.			the same.
Giacomo Cavedone	Ludov. Caracci	History	1660	80	
Agostino Metelli		Buildings, Perspective	1660	51	
Angelo Michael Colona	Ferrantino	Buildings, Hist.	1687	87	
Giov. Benedetto Castiglione, detto Il Genoese	Paggi, Vandyke.				
Pietro Testa	Domenichino	History, Whims	1650	39	capricious and strange designs.
Matthew Platten, called Il Montagna	Asselyn	Seapieces.			
Francesco Barbieri, detto Il Guercino da Cento	the Caracci	History	1667	76	a medium between the Caracci and Caravaggio; he has two manners, one a dark and strong one; the other more gay and gracious.
Pietro Berrettini, detto Pietro da Cortona	Baccio Ciarpi	History	1669	73	noble compositions; bright and beautiful colouring.
Antonino Barbalonga	Domenichino	History.			
Andrea Camaceo	Domenichino	History	1657	55	
Andrea Sacchi	Albani	History	1661	72	a colouring more languid than Pietro Cortona, but extremely delicate and pleasing.
Simone Cantarini	Guido	History	1648	36	
Cav. Carlo Cignani	Albani	History	1719	91	noble, bold manner and bright colouring.
Pietro Facini	Annibal Caracci	History	1602	42	
Giov. Andrea Donducci detto Il Masteletta	the Caracci	History	1655	80	
Alessandro Tiarini	Prospero Fontana	History	1668	91	
Leonello Spado	the Caracci	History	1622	46	
Giov. Andrea Sirani	Guido	History	1670	60	
Elisabetta Sirani	Andrea, her father	History, Portr.	1664	26	
Giacomo Sementi	Guido	History	1625	45	
Francesco Gessi	Guido	History			good imitation of his master.
Lorenzo Garbieri	Lud. Caracci	History	1654	64	
G. Francesco Romanelli	Pietro Cortona	History	1662	45	
Diego Velasquez	Francesco Pacheco	Portraits	1660	66	great fire and force.
Alessandro Veronese	Felice Riccio	History	1670	70	a weak but agreeable manner.
Mario de Fiori		Flowers	1656		
Michelangelo del Campidoglio	Fioravante	Flowers and fruits	1670	60	

Names.	Studied under.	Painted.	Died	Age.	Excelled in.
Salvator Rosa.....	Spagnoletto and Daniel Falcone	Landscape, History	1673	59	savage and uncouth places: very great and noble style; stories that have something of horror or cruelty.
Il Cav. Calabrese.....	Guercino.....	History	1688	86	
Fer. amola Fiovarenti..	.....	Vases, instruments, Carpets, & still-life	1512		
Il Maltese	.....	the same.			
Claude Gelee, called Claude Lorraine	Godfrey Wals; Agostino Tassi	Landscape	1682	82	rural and pleasing scenes, with various accidents of Nature, as gleams of sunshine, the rising moon, &c.
Nicholas Poussin	Quintin Varin	History, Landscape	1665	71	exquisite knowledge of the antique; fine expression; skilful and well chosen composition and design. Scenes of the country with ancient buildings and historical figures intermixed.
Gaspar du Ghet, called Gaspar Poussin	Nicholas, his brother-in law	Landscape	1665	..	a mixture of Nicholas's and Claude Lorraine's styles.
Eustache Le Sueur	Simon Vouet.....	History	1655	38	simplicity, dignity, and correctness of style; he is called the French Raffaelle.
Michelangelo delle Battaglie	Mozzo of Antwerp ..	Battles.			
Jaques Stella.....	his father.....	History, Miniatures	1647	51	painted upon marble frequently.
Carlo Maratti	Andrea Sacchi	History	1713	88	
Luca Giordano	Lo Spagnoletto	History	1705	76	
Charles Le Brun	Simon Vouet; Nicolas Poussin	History	1690	71	
Cav. Giacinto Brandi ..	Lanfranco.....	History	1713	90	
Ciro Ferri	Pietro Cortona	History	1689	55	

PAINTING. [from the verb *to paint.*] Painting has been defined as another sort of writing, and as subservient to the same ends as those of her younger sister. The latter, by characters, can communicate some ideas which Painting cannot, who, on her part, in other respects supplies the deficiencies of writing.

And the ideas thus conveyed to us have this advantage. They come not by a slow progression of words, or in a language peculiar to one nation only; but with such a velocity, and in a manner so universally understood, that it resembles intuition or inspiration—as the art by which it is effected resembles creation; things so considerable and of so great price being produced out of materials so inconsiderable, and of a value next to nothing.

What a tedious thing would it be to describe by words the view of a country (that from the Greenwich Observatory for instance), and how imperfect an idea would, after all, be afforded! Painting shows the thing immediately and exactly. —No words can give you a complete idea of the face and person of one you have never seen.—Painting does it effectually, with the addition of so much of his character as can be known from thence; and, moreover, in an instant recalls to your memory at least the most considerable particulars of what you have heard concerning him, or occasions that to be told which you have never heard.

Agostino Caracci, discoursing one day on the excellency of the ancient sculptures, was profuse in his praises of the Laocoon, and observing that his brother Annibale never spoke, nor seemed to take any notice of what he said, reproached him as not enough esteeming so masterly a work. He then went on describing every particular of that noble relic of antiquity. Annibale turned himself to the wall, and with a piece of charcoal drew the statue as exactly as if it had been before him. The rest of the company were surprised; and Agostino, silenced, confessed that his brother had taken a more effectual way than himself to demonstrate the beauties of that wonderful piece of sculpture. "Li poeti dipingono con le parole, li pittori parlano con l'opere,"—(the poet paints with words, the painter speaks with works), said Annibale.

The poets have peopled the air, earth, and water with angels, cupids, satyrs, and nymphs; they have imagined what is done in heaven and hell, as well as on this globe: and in like manner the painters have stored our fancies with beings and actions that had no existence save in their own teeming imaginations. They have also given us the finest natural and historical images—and all for the same end as that proposed by the poet; namely, to blend instruction with delight.

The business of painting indeed is to perform much of what discourse and books

can, and in many instances more speedily and with greater reality:—so that if history, if philosophy (natural or moral), if theology, if any of the liberal arts and sciences are worthy the notice and study of a gentleman, painting is so likewise.

To consider a picture aright is *to read it:* but, taking into account the beauty with which the eye is all the while entertained (whether of colour or composition), it is not *only* to read a book, and that finely printed and well bound, but as if a concert of music were heard at the same time. —You have at once an intellectual and a sensual pleasure.

Such are the encomiums and almost the words of an enthusiastic old writer (Richardson), on his art; and in adopting them, we feel that we do not go beyond our own sense of the importance of this charming pursuit.

By an admirable effort of human genius, painting offers to our eyes every thing which is most valuable in the universe. It presents to us the heroic deeds of ancient times as well as the facts with which we are more conversant, and distant objects as well as those we daily see. In this respect it may be considered as a supplement to nature, which gives us a view of present objects only.

It is undoubtedly to the Greeks, and to them alone, we are indebted for the highest cultivation which the imitative arts have known. In sculpture this is even now sufficiently palpable, since at this day their performances remain not only unequalled but unapproached. The same observation holds with respect to architecture; and it is probable that, so far as relates to the perfect representation of a single figure, it might be applied also to their painting: but there is great reason to conclude, that in many branches of this art they are surpassed by the great names among the moderns. In Egypt, the knowledge of that principle which is most desirable in art (selection) never appears to have operated far. When a specific form of character was once adopted, there it remained, and was repeated unchanged for generations. Little action was given to figures, and no attempts at all made at expression. Pliny reports, that the statues executed by the Egyptians in his time differed in no respect whatever from those made by them a thousand years before. Of their paintings a few remain to the present era, but the date of these relics is by no means evident. Two of them (seen at Thebes, and described by Bruce), are referred by him to the time of Sesostris (about 700 years B. C.) who is said to have restored and embellished that city; but this is mere conjecture. He remarks of these paintings, that they might be compared with good sign-paintings of his day. For further observations on the earliest origin of Painting, see Arts.

We shall not detail here the reasons and the coincidence of fortunate circumstances which raised the Greeks to be the arbiters of form. "The standard they erected (says Fuseli), the canon they framed, fell not from heaven: but as they fancied themselves of divine origin, and *religion* was the first mover of their art, it followed that they should endeavour to invest their authors with the most perfect form; and as man possesses that exclusively, they were led to a complete and intellectual study of his elements and constitution; this, with their *climate*, which allowed that form to grow, and to show itself to the greatest advantage; with their *civil* and *political* institutions, which established and encouraged exercises and manners best calculated to develope its powers; and, above all, that simplicity of their end, that uniformity of pursuit which in all its derivations retraced the great principle from which it sprang, and like a central stamen drew it out into one immense connected web of congenial imitation; these, I say, are the reasons why the Greeks carried the art to a height which no subsequent time or race has been able to rival or even to approach.

"Great as these advantages were, it is not to be supposed that Nature deviated from her gradual progress in the development of human faculties, in favour of the Greeks. Greek art had her infancy, but the Graces rocked the cradle, and Love taught her to speak. If ever legend deserved our belief, the amorous tale of the Corinthian maid, who traced the shade of her departing lover by the secret lamp, appeals to our sympathy to grant it; and leads us at the same time to some observations on the first mechanical essays of painting, and that *linear method* which, though passed nearly unnoticed by Winckelmann, seems to have continued as the basis of execution, even when the instrument for which it was chiefly adapted had long been laid aside.

"The etymology of the word used by the Greeks to express *painting* being the same with that which they employ for *writing*, makes the similarity of tool, materials, method, almost certain. The tool was a style or pen of wood or metal; the materials a board, or a levigated plane of wood,

metal, stone, or some prepared compound; the method, letters or lines.

"The first essays of the art were *skiagrams*, simple outlines of a shade, similar to those which have been introduced to vulgar use by the students and parasites of physiognomy, under the name of Silhouettes; without any other addition of character or feature but what the profile of the object thus delineated, could afford.

"The next step of the art was the *monogram*, outlines of figures without light or shade, but with some addition of the parts within the outline, and from that to the *monochrom*, or paintings of a single colour on a plane or tablet, primed with white, and then covered with what they called punic wax, first amalgamated with a tough resinous pigment, generally of a red, sometimes dark brown, or black colour. *In*, or rather *through* this thin inky ground, the outlines were traced with a firm but pliant style, which they called *cestrum;* if the traced line happened to be incorrect or wrong, it was gently effaced with the finger or with a sponge, and easily replaced by a fresh one. When the whole design was settled, and no farther alteration intended, it was suffered to dry, was covered, to make it permanent, with a brown encaustic varnish, the lights were worked over again, and rendered more brilliant with a point still more delicate, according to the gradual advance from mere outlines to some indications, and at last to masses of light and shade, and from those to the superinduction of different colours, or the invention of the *polychrom*, which, by the addition of the *pencil* to the style, raised the mezzotinto or stained drawing to a legitimate picture, and at length produced that vaunted *harmony*, the magic scale of Grecian colour.

"If this conjecture, for it is not more, on the process of linear painting, formed on the evidence and comparison of passages always unconnected, and frequently contradictory, be founded in fact, the rapturous astonishment at the supposed momentaneous production of the Herculanean dancers, and the figures on the earthen vases of the ancients, will cease; or rather, we shall no longer suffer ourselves to be deluded by palpable impossibility of execution: on a ground of levigated lime or on potter's ware, no velocity or certainty attainable by human hands can conduct a full pencil with that degree of evenness equal from beginning to end with which we see those figures executed, or, if it could, would ever be able to fix the line on the glassy surface without its flowing: to make the appearances we see possible, we must have recourse to the linear process that has been described, and transfer our admiration to the perseverance, the correctness of principle, the elegance of taste that conducted the artist's hand, without presuming to arm it with contradictory powers: the figures he drew, and we admire, are not the magic produce of a winged pencil, they are the result of gradual improvement, exquisitely finished *monochroms*.

"How long the pencil continued only to assist, when it began to engross, and when it at last entirely supplanted the cestrum, cannot, in the perplexity of accidental report, be ascertained. Apollodorus, in the ninety-third olympiad, and Zeuxis, in the ninety-fourth, are said to have used it with freedom and with power. The battle of the Lapithæ and the Centaurs, which, according to Pausanias, Parrhasius painted on the shield of the Minerva of Phidias, to be chased by Mys, could be nothing but a monochrom, and was probably designed with the cestrum, as an instrument of greater accuracy. Apelles and Protogenes, nearly a century afterwards, drew their contested lines with the pencil; and that alone, as delicacy and evanescent subtlety were the characteristics of those lines, may give an idea of their mechanic excellence. And yet in their time the *diagraphic* process, which is the very same with the *linear* one we have described, made a part of liberal education. And Pausias of Sicyon, the contemporary of Apelles, and perhaps the greatest master of composition amongst the ancients, when employed to repair the decayed pictures of Polygnotus at Thespiæ, was adjudged by general opinion to have egregiously failed in the attempt, because he had substituted the pencil for the cestrum, and entered a contest for superiority with weapons not his own.

"Here it might seem in its place to say something on the encaustic method used by the ancients; were it not a subject by ambiguity of expression and conjectural dispute so involved in obscurity that a true account of its process must be despaired of: the most probable idea we can form of it is, that it bore some resemblance to our oil painting, and that the name was adopted to denote the use of materials, inflammable or prepared by fire, the supposed durability of which, whether applied hot or cold, authorized the terms ἐνεκαυσε and *inussit*."

In Pliny, we find some allusion made to

an artist of the name of Saurias, who, according to him, practised the earliest stage of the art, and is said to have drawn the figure of a horse. Mention is also made of Cleanthes of Corinth, Ardices, likewise of Corinth, Philocles the Egyptian, and Telephanes of Sicyon, who advanced to the monographic style. The first-mentioned of these artists is reported to have been the original practiser of the monochromatic, and his colour to have been that of a pounded tile. About the same era, Hygiemon, Dinias, and Charmas appear to have wrought, of whom one might possibly have improved the monochromatic style. Quinctilian remarks of these primeval artists, "they could so manage their single colour as to give every appearance of relief to parts;" but how (chiaro-scuro being then unknown) he does not explain. Subsequently came Eumarus the Athenian, and Cymon of Cleonea; the latter of whom receives praise from Pliny for having advanced the art by giving variety of attitudes to his figures, attending to the folds of draperies, and marking with discrimination the veins, joints, &c. of the human body.

But the existence of the names of these artists is unaccompanied by a record of any nature whatever as to the date at which they flourished; and the painter named Bularchus, the sale of whose *Battle of the Magnetes* to Candaules, king of Lydia, we mentioned in the preceding article, is the first as to whom there seems to be any veracious testimony.

Whatever might have been the degree of excellence to which the immediate successors of this fortunate painter carried their art, we must be content to remain in utter ignorance respecting it. Probably the confusion and anarchy which are the necessary results of foreign war, aided by civil commotion (a state which about this period brought Athens, and indeed all Greece, near to ruin), obstructed in no unimportant degree the cultivation of an accomplishment which, to be successfully practised, demands the fostering assistance of patronage, of science, and, above all, of national security.

Xerxes, however, having at length been expelled from Greece, the load which hung on the backs and spirits of her lively population was thrown off, and genius, under a brighter sky, issued from her obscurities in order to excite admiration and reward. The liberal arts, aided by the general cultivation of mind, were summoned to preside at the erection of monuments voted by their applauding countrymen to the national heroes; and again we are enabled to trace the steps of painting, still weak, and tottering in her gait at first, but soon making rapid strides towards the highest point she is supposed to have ever reached.

And here it will be curious to observe the better fate which seems to have attended the sister art of sculpture, which was in all probability practised with continued success even during the times of distress and warfare. The necessities of that idolatrous religion by which the Greeks were controlled might indeed have alone required the exertion of all the talents the nation could produce. In no other way is that immense advance to be explained which sculpture achieved before the art of which we are now treating. Phidias (the most illustrious sculptor the world ever saw) is said to have guided the hand of his brother Panænus in adorning the walls of the Pœcile portico at Athens. These two brothers afford an apt illustration in their own persons of the respective fates of the arts they practised. The name of Phidias is as familiar to every man of gentlemanly endowment as his own. That of Panænus is known only to the few who trace back to their starting post the early and obscure footsteps of the muse of painting. The performances of Phidias (particularly those in the temple of Minerva, called the Parthenon), remain even to the present day a source of admiration, of wonder, and envy. Those of Panænus exhibited his art still in its infancy, and have been for many revolving ages buried in the stream of oblivion.—To this man, however, Greece appears to have been indebted for an anxious zeal, at least, to advance the art he practised to a more equal station with sculpture; and in his time there were prizes established both at Delphos and Corinth, for its encouragement, whereat he himself contended, but was excelled by Timogras of Chalcis.

The first great name of that epoch of the preparatory period, when facts appear to overbalance conjecture, is that of Polygnotus of Thasos, who painted the Pœcile at Athens, and the Lesche, or public hall, at Delphi. Of these works, but chiefly of the two large pictures at Delphi, which represented scenes subsequent to the eversion of Troy, and Ulysses consulting the spirit of Tiresias in Hades, Pausanias gives a minute and circumstantial detail; by which we are led to surmise that what is now called *composition* was totally wanting in them as a whole; for he begins his

description at one end of the picture, and finishes it at the opposite extremity,—a senseless method, if we suppose that a central group, or a principal figure to which the rest were in a certain degree subordinate, attracted the eye; it appears as plain that they had no perspective, the series of figures on the second or middle ground being described as placed *above* those in the foreground, and the figures in the distance above the whole: the honest method, too, which the painter chose of annexing to many of his figures their names in writing, savours much of the infancy of painting. This circumstance, however, we should be cautious in imputing either to ignorance or imbecility, since it might rest on the firm base of permanent principles. The genius of Polygnotus was, more than that of any other artist, before or after, a public genius, his works monumental works, and these very pictures the votive offerings of the Gnidians. Polygnotus was, in fact, a man endowed with uncommon ability, and certainly advanced his art very far in point of expression and action in his figures, and in ideal colouring. Of the truth of this observation, his figure of the demon Eurynomus in one of the pictures abovementioned, namely, Ulysses consulting the shade of Tiresias in Hades, affords sufficient proof. "His colour," says Pausanias, "is between black and azure, like that of the flies which infest meat; he shows his teeth, and sits upon the skin of the vulture." Lucian and Pliny both speak in high commendation of this artist; the former in particular, invoking his aid to finish his perfect woman, exclaims:—"Polygnotus shall open and spread her eyebrows, and give her that fine, glowing, decent blush which beautifies so irresistibly his Cassandra. He also shall give her a flowing, unconstrained attire, which, with all its delicate wavings, shall partly adhere to her body and partly flutter in the wind."

"Polygnotus, says Aristotle, *improves* the model. His invention reached the conception of undescribed being, in the demon Eurynomus; filled the chasm of description in Theseus and Pirithous, in Ariadne and Phœdra; and improved its terrors in the spectre of Tityus; whilst colour to assist it became in his hand an organ of expression; such was the prophetic glow which still *crimsoned* the cheeks of his Cassandra in the time of Lucian. The improvements in painting which Pliny ascribes to him, of having dressed the heads of his females in variegated veils and *bandeaus*, and robed them in lucid drapery, of having gently opened the lips, given a glimpse of the teeth, and lessened the former monotony of face,—such improvements were surely the most trifling part of a power to which the age of Apelles and that of Quinctilian paid equal homage: nor can it add much to our esteem for him, to be told by Pliny that there existed, in the portico of Pompey, a picture of his with the figure of a warrior in an attitude so ambiguous as to make it a question whether he were ascending or descending. Such a figure could only be the offspring of mental or technic imbecility, even if it resembled the celebrated one of a Diomede carrying off the palladium with one, and holding a sword in the other hand, on the intaglio inscribed with the name of Dioscorides.

"With this simplicity of manner and materials the art seems to have proceeded from Polygnotus, Aglaophon, Phidias, Panænus, Colotes, and Evenor, the father of Parrhasius, during a period of more or less disputed olympiads, till the appearance of Apollodorus the Athenian, who applied the essential principles of Polygnotus to the delineation of the species, by investigating the leading forms that discriminate the various classes of human qualities and passions. The acuteness of his taste led him to discover that as all men were connected by one general form, so they were separated each by some predominant power, which fixed character and bound them to a class: that in proportion as this specific power partook of individual peculiarities, the farther it was removed from a share in that harmonious system which constitutes nature, and consists in a due balance of all its parts: thence he drew his line of imitation, and personified the central form of the class to which his object belonged; and to which the rest of its qualities administered without being absorbed: agility was not suffered to destroy firmness, solidity, or weight; nor strength and weight agility; elegance did not degenerate to effeminacy, or grandeur swell to hugeness; such were his principles of style: his expression extended them to the mind, if we may judge from the two subjects mentioned by Pliny, in which he seems to have personified the characters of devotion and impiety; *that*, in the adoring figure of a priest, perhaps of Chryses, expanding his gratitude at the shrine of the god whose arrows avenged his wrongs and restored his daughter: and *this*, in the figure of Ajax wrecked, and from the sea-swept rock hurling defiance unto the murky

sky. As neither of these subjects can present themselves to a painter's mind without a contrast of the most awful and the most terrific tones of colour, magic of light and shade, and unlimited command over the tools of art, we may with Pliny and with Plutarch consider Apollodorus as the first assertor of the pencil's honours, as the first colourist of his age, and the man who opened the gates of art which the Heracleot Zeuxis entered.

"From the essential style of Polygnotus and the specific discrimination of Apollodorus, Zeuxis, by comparison of what belonged to the genius and what to the class, framed at last that ideal form, which, in his opinion, constituted the supreme degree of human beauty, or, in other words, embodied possibility, by uniting the various but homogeneous powers scattered among many, in one object, to one end. Such a system, if it originated in genius, was the considerate result of taste refined by the unremitting perseverance with which he observed, consulted, compared, selected the congenial but scattered forms of nature."

Quinctilian remarks of Zeuxis, that he considered the poetic unity of character adopted by Homer, in the descriptions of his heroes, as his model; giving to each individual he painted the peculiar distinction of a class. It is said, and the anecdote bears on the remark, that, previously to commencing a picture of Juno for her temple at Agrigentum, he requested to see all the most beautiful maidens of the city naked, and from them selected five whose shape he most admired; purposing to exhibit the most perfect combination of female forms, by selecting and adopting the most beautiful parts of each. Of the colouring employed by Zeuxis, little is known with certainty; but it may doubtless be inferred with some fairness, that it rivalled the excellences of his design, and from his alleged method of painting monochroms on a black ground, adding the lights in white, we may deduce that he understood the extension of light and shade to masses.

Timanthes, Eupompus, Androcides, and Parrhasius the Ephesian, all flourished during the same era with Zeuxis. The latter, however, is the only one who may be said to have rivalled that eminent artist, and indeed it is hard to tell which of the two bore the palm, or most self-sufficiently claimed it. The story related by Pliny of their contest is not decisive on the former point, since those pictures had little to do with the real excellences of either artist except in the one quality of colouring. Zeuxis painted grapes; and on exhibiting his picture, the birds came with the greatest avidity to pluck them. The rival artist then proceeded to display *his* performance, and on being introduced to the spot, Zeuxis exclaimed, "Remove your curtain that we may see the painting." The curtain *was* the painting, and Zeuxis confessed himself vanquished, exclaiming, "Zeuxis has deceived birds, but Parrhasius has deceived Zeuxis himself." Now, how does this fact, if it be regarded as one, tally with the limitation of Pliny as to the colours used by the ancient artists? A curtain may, it is true, be of a dull colour, and such a one might possibly have been imitated by Parrhasius with such materials, and so perfectly, as to have deceived Zeuxis: but it is to be presumed that the luscious transparency, colour, and brilliancy of the grape, in those days, were not very widely different from what it now exhibits; and those pure qualities can only be represented by the purest and most perfect of colours. Parrhasius is reported to have had a surer eye than this celebrated rival for proportion and symmetry: he circumscribed the ample style of Zeuxis, and, by subtle examination of outline, established that standard of divine and heroic form which raised him to the authority of a legislator from whose decisions there was no appeal. He gave to the divine and heroic character, in painting, what Polycletus had given to the human in sculpture, by his Doryphorus, a canon of proportion. "Phidias had discovered in the nod of the Homeric Jupiter the characteristic of majesty, *inclination of the head:* this hinted to him a higher elevation of the neck behind, a bolder protrusion of the front, and the increased perpendicular of the profile. To this conception Parrhasius fixed a maximum; that point from which descends the ultimate line of celestial beauty, the angle within which moves what is inferior, beyond which what is portentous. From the head conclude to the proportions of the neck, the limbs, the extremities; from the father to the race of gods; all the sons of one, Jupiter; derived from one source of tradition, Homer; formed by one artist, Phidias: on him measured and decided by Parrhasius. In the simplicity of this principle, adhered to by the succeeding periods, lies the uninterrupted progress and the unattainable superiority of Grecian art. With this prerogative, which

evidently implies a profound as well as general knowledge of the parts, how are we to reconcile the criticism passed on the intermediate parts of his forms as inferior to their outline? or how could Winckelmann, in contradiction with his own principles, explain it, by a want of anatomic knowledge? how it is possible to suppose that he who decided his outline with such intelligence that it appeared ambient, and pronounced the parts that escaped the eye, should have been uninformed of its contents? Let us rather suppose that the defect ascribed to the intermediate forms of his bodies, if such a fault there was, consisted in an affectation of smoothness bordering on insipidity, in something effeminately voluptuous, which absorbed their character and the idea of elastic vigour; and this Euphranor seems to have hinted at, when in comparing his own Theseus with that of Parrhasius, he pronounced the Ionian's to have fed on roses, his own on flesh: emasculate softness was not in his opinion the proper companion of the contour, or flowery freshness of colour an adequate substitute for the sterner tints of heroic form.

"None of the ancients seem to have united or wished to combine, as man and artist, more qualities seemingly incompatible than Parrhasius:—the volubility and ostentatious insolence of an Asiatic with Athenian simplicity and urbanity of manners; punctilious correctness with blandishments of handling and luxurious colour, and with sublime and pathetic conception a fancy libidinously sportive. If he was not the inventor, he surely was the greatest master of allegory, supposing that he really embodied, by signs universally comprehended, that image of the Athenian ΔΗΜΟΣ or people, which was to combine and to express at once its contradictory qualities. Perhaps he traced the jarring branches to their source, the aboriginal moral principle of the Athenian character, which he made intuitive. This supposition alone can shed a dawn of possibility on what else appears impossible. We know that the personification of the Athenian Δημος was an object of sculpture, and that its images by Lyson and Leochares were publicly set up; but there is no clue to decide whether they preceded or followed the conceit of Parrhasius. It was repeated by Aristolaus, the son of Pausias.

"The decided forms of Parrhasius, Timanthes the Cythnian, his competitor for fame, attempted to inspire with mind and to animate with passions. No picture of antiquity is more celebrated than his immolation of Iphigenia in Aulis, painted, as Quinctilian informs us, in contest with Colotes of Teos, a painter and sculptor from the school of Phidias; crowned with victory at its rival exhibition, and since, the theme of unlimited praise from the orators and historians of antiquity, though the solidity or justice of their praise relatively to the art has been questioned by modern criticism."

The art now continued to advance with rapid strides. Nature was the guide; and to develope her various charms (in expression, shape, and colour) the object of the artists. The leading principle of Eupompus may be traced in the advice which he gave to Lysippus (as preserved by Pliny), whom, when consulted on a standard of imitation, he directed to the contemplation of human variety in the multitude of characters who were passing by. "Behold," said the painter, "behold my models! From nature, not from art, by whomsoever wrought, must he study who seeks to acquire reputation and extend the scope of his art." The doctrine of Eupompus was adopted by Pamphilus the Amphipolitan (the most scientific artist of his time), and by him transmitted to Apelles of Cos (or, according to Lucian, of Ephesus), his pupil. This wonderful person was, if we may credit the tradition respecting him, gifted with such a combination of natural and acquired endowments as never, perhaps, either before or since, fell to the lot of another individual. In addition, he had the happiness to live at that period wherein the genius of his country had reached its highest point of elevation. The name of Apelles in Pliny is the synonyme of unrivalled and unattainable excellence, but in our estimate of his talents we must candidly consider what modifications may be requisite on an enumeration of his actual works. It is very difficult to ascertain how far real value may be attached to the panegyrics on works of art. These will always be bestowed, in the highest strain, on the best works of the writer's time: and thus we observe that, at all periods, contemporary authors have expressed the same degrees of approbation, and in the same terms, of the pictures they have seen produced; whilst we know that, as art was slow in its progress, it is impossible that in every stage it would have merited equal commendation. The works of Apelles, so far as it is possible to comprehend their nature, exhibit neither the deepest pathos of expression, the widest sphere of com-

prehension, nor the most acute discrimination of character: his great prerogative consisted, perhaps, more in the unison than in the extent of his powers: he knew better what his capabilities could achieve, and what lay beyond them, than any other artist. Grace of conception and refinement of taste were his elements, and went hand in hand with grace of execution, and completeness in finish, irresistible when found united. The *Venus* of Apelles, or, as it may rather be called, the personification of the birthday of Love, was esteemed as the most splendid achievement of art; the outline of the goddess baffled every attempt at improvement, whilst imitation shrunk from the purity, the force, the brilliancy, the evanescent gradations of her tints.

The pictures produced by this consummate artist appear to have been numerous, and the reader will find, in Pliny, lib. xxxv. cap. 10, a pretty extensive list. A brief enumeration of some of them will serve to convey a just idea of the class of subjects generally chosen by him.

The portraits painted by him both of Alexander the Great and his father Philip were numerous; some of them single, some accompanied by other figures. *Alexander launching thunder*, in the temple of Diana at Ephesus, has been greatly extolled for its effect and the boldness of its relief, "the hand which was raised appearing to come forward, and the lightning to be out of the picture." In another portrait of the same prince, he was represented in a triumphal chariot, and near him the figure of war, with his hands tied behind his back.

This, and another Alexander, accompanied by Castor and Pollux, and a figure of Victory, were preserved by Augustus in the forum.

Many other portraits are alluded to: namely, Antiochus, king of Syria; Antigonus; Archelaus, with his wife and daughter; Abron, an effeminate debauchee; Clatus, on horseback armed (except his head), with an attendant delivering his helmet to him; and Megabysus, a priest of the temple of Diana at Ephesus, sacrificing, in his pontifical vestments. In fanciful subjects we find:—Diana attending a sacrifice, surrounded by her nymphs; Neoptolemus, son of Achilles, on horseback, contending with Persians; Hercules, with his back towards the observer, and his head turned round so as to show his face; and lastly, his renowned picture of Venus rising from the sea, already mentioned, which, being taken to Rome, was dedicated by Augustus in the temple of Julius Cæsar; and upon which several Greek epigrams are to be found in the Anthologia.

"The refinements of the art were by Aristides of Thebes applied to the mind. The passions which history had organized for Timanthes, Aristides caught as they rose from the breast or escaped from the lips of nature herself; his volume was man, his scene society: he drew the subtle discriminations of mind in every stage of life, the whispers, the simple cry of passion, and its most complex accents. Such, as history informs us, was the suppliant whose voice you seemed to hear, such his sick man's half-extinguished eye and labouring breast, such the sister dying for her brother, and, above all, the half-slain mother shuddering lest the eager babe should suck the blood from her palsied nipple. This picture was probably at Thebes, when Alexander sacked that town; what his feelings were when he saw it, we may guess from his sending it to Pella. Its expression, poised between the anguish of maternal affection and the pangs of death, gives to commiseration an image, which neither the infant piteously caressing his slain mother in the group of Epigonus, nor the absorbed feature of the Niobe, nor the struggle of the Laocoon, excite. Timanthes had marked the limits that discriminate terror from the excess of horror; Aristides drew the line that separates it from disgust. His subject is one of those that touch the ambiguous line of a squeamish sense.—Taste and smell, as sources of tragic emotion, and in consequence of their power, commanding gesture, seem scarcely admissible in art or on the theatre, because their extremes are more nearly allied to disgust, and loathsome or risible ideas, than to terror. The prophetic trance of Cassandra, who scents the prepared murder of Agamemnon at the threshold of the ominous hall; the desperate moan of Macbeth's queen on seeing the visionary spot still uneffaced infect her hand—are images snatched from the lap of terror—but soon would cease to be so, were the artist or the actress to enforce the dreadful hint with indiscreet expression or gesture. This, completely understood by Aristides, was as completely missed by his imitators, Raffaelle in the *Morbetto*, and Poussin in his Plague of the Philistines. In the group of Aristides our sympathy is immediately interested by the mother, still alive though mortally

wounded, helpless, beautiful, and forgetting herself in the anguish for her child, whose situation still suffers hope to mingle with our fears; he is only approaching the nipple of the mother. In the group of Raffaelle, the mother dead of the plague, herself an object of apathy, becomes one of disgust, by the action of the man, who bending over her, at his utmost reach of arm, with one hand removes the child from the breast, whilst the other, applied to his nostrils, bars the effluvia of death. Our feelings alienated from the mother, come too late even for the child, who by his languor already betrays the mortal symptoms of the poison he imbibed at the parent corpse. It is curious to observe the permutation of ideas which takes place, as imitation is removed from the sources of nature: Poussin, not content with adopting the group of Raffaelle, once more repeats the loathsome attitude in the same scene; he forgot, in his eagerness to render the idea of contagion still more intuitive, that he was averting our feelings with ideas of disgust."

At the same era flourished Protogenes of Rhodes, towards whom the generous conduct of Apelles deserves particular mention. Protogenes had painted a picture of Jalysus, which so delighted Apelles that he sailed to Rhodes on purpose to visit his accomplished cotemporary. There finding him in poverty and obscurity, he is reported to have bought several of the performances of Protogenes with the avowed intention of selling them as his own, and thus succeeded in exciting the notice of the people of Rhodes towards the abilities of their fellow-citizen, who thence rose from his hitherto humble situation to fame and fortune. The well known friendly contest of Apelles and Protogenes respecting the *Lines* has been described elsewhere, and stands as a fact on undeniable testimony. The tablet whereon they were drawn, having been taken to Rome, was there seen by Pliny himself, who speaks of it as having the appearance of a large blank surface, the extreme delicacy of the lines rendering them invisible except on close inspection. They were drawn with different colours—one upon, or rather within, the other. Judging from Pliny's account, it might be imagined that all the beauty lay in the extreme delicacy of the points which had been used, and of the hands which had applied them; but it is reasonable to suppose, that the first direction of the line might have some principle of beauty for its guide, by which, as well as by the neatness of its execution. Protogenes was immediately moved to the declaration, that none but Apelles could have drawn it.

But we must hasten to conclude our review of the art, as practised by the ancients. The refinements of expression, which have been so abundantly praised in our account of Aristides, were carried to a still higher pitch by Euphranor the Isthmian, his disciple, who is said to have excelled equally as painter and statuary. At this time, indeed, the art of painting seems to have been supported in Greece by many celebrated men, renowned for their distinctive excellences: but from the means which we retain of tracing its history and progress, it is extremely difficult to decide as to the precise degree of superiority to which the Greeks attained in several departments of this delightful art, as its principles are now understood. In the examination of this interesting question, the various authors who have treated of it have put forth opinions widely different from each other; some have been led away by a blind admiration of every thing ancient, while others, running into the opposite extreme, have regarded the efforts in painting of the ancients merely with an eye of contempt. Here, as in most cases, truth is to be found by steering between the two. It is certain that no great works are remaining which would enable us to judge confidently on the matter, but there are many reasons, independently of the direct testimony borne to their worth by Pliny and others (whose general perceptions of beauty give strength to what they say in this particular), and among these we may reckon foremost the unquestioned perfection to which the sister arts of sculpture and poetry had risen amongst them, the former of which may indeed almost be termed the twin-sister of painting.

In comparing the performances of modern painters with the character of those the names and description of which ancient authors have handed down to us, it will appear pretty clearly that the Greek artists surpassed the moderns in sentiment, in invention or imagination, in expression, in position of figures, in proportion, and contour. With regard to colour, the case is by no means so evident. Pliny allows them the use of but four, and yet at other times makes allusions which palpably imply their means of that kind to be far more extensive. The use of oils has however given to moderns a decided advantage in this particular. Their colours were, how-

ever, both vivid and enduring, as is obvious from the fact of their paintings having existed uninjured, and become objects of admiration to the Romans several ages after they were executed. They were in the habit of employing a sort of varnish called *atramentum*, which served to secure their paintings from the influence of the atmospheric air.

Whether the art of *composition*, at least in the scientific way now practised, was ever understood by them, or whether they possessed any knowledge whatever of the laws of chiaro-scuro, is wrapped up in doubt and mystery which it is next to impossible any opportunity will occur of unravelling. The accounts of these performances by ancient writers do not seem to have sprung from any practical acquaintance with the rules of the art, and hence they are, as will be readily imagined, very vague and unsatisfactory to the painter. According to the light which is thus afforded us, we are led to conclude that the chief aim of the Greek artists was to impress on the mind of the spectator in the most energetic way the effect of one particular image; we do, it is true, occasionally encounter descriptions of pictures containing many figures, but in general the subject is confined to the introduction of two or three. Nothing is said by these writers of what we term *background*, and little on the contrasts of light and shade, &c. That they had some knowledge of this kind, however, is apparent from an observation of Plutarch, namely, that "painters heighten the brilliancy of light colours by opposing them to dark ones, or to shades;" and from another, of Pliny, who, speaking of painters in the monochromatic style, adds:—"In process of time the art assumed new powers, and discovered light and shadow, by gradating which the colours are alternately kept down or heightened. Afterward *splendour* was added, which was different from light, and which, being a medium between light and shade, was denominated *tonon;* while the union of colours, and transition from one to another, they called *harmogen* (lib. xxxv. c. 5). Hence we find that the great requisites for the science of *chiaro-scuro*, viz. contrast, tone, and *harmony*, were comprehended by them; that the various degrees of light and shade, distinctly and in combination, were duly felt, and that the value of *middle* or *half tint* was perceived and attended to. Led away by these facts, M. du Bos and others have concluded that *chiaro-scuro* was scientifically comprehended and practised by them. It will not fail, however, to strike the artist, that every thing stated by Pliny to have been known by the ancient artists is resolvable into that which is requisite for the due execution of a single figure on a plain ground, and in the most simple style of execution. In the best of the paintings found at Herculaneum there is exhibited an unusually skilful management of chiaro-scuro in the reduction of tone on parts, both of the flesh and drapery, but it is inconclusive on the general point at issue.

With respect to their knowledge of perspective, similar uncertainty appears to exist. Vitruvius, indeed, reports it to have been practised by Agatharcus (a contemporary of Æschylus and Polygnotus), in the theatre at Athens; and to have been shortly after reduced to principles, and treated as a science, by Anaxagoras and Democritus. The deductions, however, are made from premises of a similarly inconclusive nature to those enumerated in our observations on *chiaro-scuro*.

Lastly, we may remark that no mention, at all events none of consequence, is made of *a ground of relief* by the ancient writers on painting. *Landscape* also appears to have been wholly disregarded. There are attempts at *background* made in several of the paintings of Herculaneum, but undeserving of any commendation; and the most beautiful of those productions of ancient art which have hitherto been displayed to the eyes of the moderns are of figures relieved off plain grounds, or rather amalgamated into them. In none of the criticisms or observations of ancient authors is a secondary object ever mentioned as being in *the distance*.

The paintings of the ancient artists were either movable, or on the cielings or compartments of buildings. Those of the first-mentioned description were deemed the most valuable, and were either on fir wood, larch, box wood, or canvas:—sometimes, indeed, they seem to have used marble. When wood was employed, they laid in, in the first instance, a white ground. Among the antiquities of Herculaneum are four paintings in white marble.

Their immovable paintings on walls were either in fresco or on the dry stucco in distemper. Indeed, all the ancient paintings may be reduced to, *first*, fresco painting; *secondly*, water colour or distemper painting, on a dry ground; and, *thirdly*, encaustic painting. The outlines of the ancient paintings in fresco were probably done at once, as appear from the depth of

the incision and the boldness and freedom of the design, equal to the care and spirit of a penciled outline.

We shall not dwell at all on the degree of cultivation bestowed on the art of painting by the ancient Romans, to which we briefly adverted in the preceding article, but pass on to enumerate the several colours stated by Pliny to have been known to them (see lib. xxxv. caps. 6 and 7.) and enumerated in Rees's Cyclopædia.

WHITES.—*Melinum.* A native white earth from the island of Melos, used by Apelles before white lead prepared with vinegar was invented.

Paræonium. An Egyptian white earth used in distemper, and similar, probably, to the white now called Cremnitz white, from Hungary. Pliny complains that paræonium was often adulterated with Cimolian earth, which was used by the fullers at Rome.

Eretria. An ashy white. It is so named from a town of Eubœa, now Trocco.

Cerussa. White lead.

Anulare. Gypsum. *Creta.* Chalk.

YELLOWS.—*Sil.* Ochre of four kinds; named Atticum, Lucidum, Syricum, and Marmorosum.

Auripigmentum, or *Arsenicum.* Orpiment.

Cerussa usta. Masticot, first discovered by the fire at the Piræus.

REDS.—*Minium.* Red lead, both natural and artificial. The best native minium was found in a quicksilver mine, near Ephesus; and in endeavouring to extract gold from it, Callias the Athenian discovered vermilion.

Vermilion. The same as now used.

Sinopis. A red earth. The best was found near Lemnos, and was so valuable as to be sold sealed up. It approached near, in colour, to minium.

Rubrica. A red earth.

Cinnabar. Native Indian name for dragon's blood.

Sandaracha. A red orpiment.

Sandyx. By some thought to be vegetable red, and obtained somewhat after the manner of our lakes, viz. absorbing the colouring matter of a decoction of the vegetable matter in chalk.

Purpurissum. A lake made from the ingredient used in dyeing purple, being absorbed in tripoli.

Syricum. A mixture of sinopis and sandyx.

Armenium, or *Azure,* also called *Ceruleum.* Verd'azur, or blue vitriol. Pliny calls it a sand; and says there were three kinds, viz. the Egyptian, the Scythian, and the Cyprian.

Indicum. Indigo.

GREENS.—*Chrysocolla.* Malachite, or mountain green.

Appianum. Another of the same nature.

BLACKS.—*Atramentum.* A common name for all black colours. Pliny speaks of one kind as oozing from the earth; and it may possibly have been some kind of bitumen: of another, as being made from smoke of resin and pitch. Burnt lees of wine or husks of grapes produced a third, used by Polygnotus and Mycon, under the name of *truginon;* and a fourth was invented and used by Apelles, by burning ivory. That, being made thin by some process, was probably the atramentum or varnish, which he is said to have laid over the surface of his pictures. What this process was is unknown: perhaps, as the mode of painting with wax by heat was practised, it might have been some modification of that material.

Of the above colouring substances, Apelles and other ancient artists employed, if we are to give credit to Pliny, only four. Here, however, he seems to have placed himself between the horns of a dilemma: since we are compelled to question either his correctness as to their limitation of colours or the abundant encomiums which he bestows on their works. Four *perfect* colours, it is true, with all their modifications and combinations, may be regarded as adequate to every purpose the art of colouring might require. But the celebrated historian has forbidden us to speculate on the possibility of this perfection, by *naming* the substances; and since the present practice of art (although possessed of substances far more powerful than those enumerated above) denies the knowledge of any four pigments equal to the production of a really fine piece of colouring, we are, as before observed, compelled to suspend our judgment on the subject.

The art of painting was revived in Europe about the end of the thirteenth or beginning of the fourteenth century. It might have been practised in an humble and obscure manner somewhat earlier, but it was not until a still later period that it made any thing like progress. The human mind, having been plunged into profound ignorance, was destitute of every principle of sound philosophy which enables it to determine on the object of the arts; and consequently the painters contented themselves with works adapted to the general taste, without proportion and

without beauty. In Italy, where the first attempts were made, they were employed chiefly on subjects connected with religious feelings, such as the mysteries of the *passion*, &c.; and their labours were principally to the adornment of ecclesiastical buildings.

Painting, however, did not long continue in the imperfect condition in which it was left by those who first cultivated it among the moderns. It was to be expected that their successors should endeavour to surpass them by joining some degree of theory to the barbarous practice they had adopted. Among the first points of art discovered after its restoration, was the principle of *perspective*, a knowledge of which made the artists capable of expressing what is denominated *foreshortening*, by means of which a greater degree of truth and effect was afforded to their performances. Cimabue, Giotto, Masaccio, Mantegna, and Luca Signorelli, successively upheld the dawning glories of revived art. The latter, in particular, appears to have been the first who contemplated objects with a discriminating eye; perceived what was accidental, what essential; balanced light and shade, and decided the motion of his figures. He foreshortened with equal boldness and intelligence; and thence it is, probably, that Vasari fancies to have discovered, in the Last Judgment of Michel Angiolo, traces of imitation from the Lunetta, painted by Luca in the church of the Madonna, at Orvieto; but the powers which animated him there, and before at Arezzo, are no longer visible in the Gothic medley with which he filled two compartments in the chapel of Sextus IV. at Rome.

Two years after the death of Masaccio (namely, in 1445), was born Lionardo da Vinci, whose genius broke forth with a splendour which distanced former excellence: "made up of all the elements that constitute the essence of genius, favoured by education and circumstances, all ear, all eye, all grasp; painter, poet, sculptor, anatomist, architect, engineer, chymist, machinist, musician, man of science, and sometimes empiric, he laid hold of every beauty in the enchanted circle, but without exclusive attachment to one, dismissed in her turn each. Fitter to scatter hints than to teach by example, he wasted life, insatiate in experiment. To a capacity which at once penetrated the principle and real aim of the art, he joined an inequality of fancy that at one moment lent him wings for the pursuit of beauty, and the next flung him on the ground to crawl after deformity: we owe him chiaroscuro with all its magic, we owe him caricature with all its incongruities. His notions of the most elaborate finish and his want of perseverance were at least equal; —want of perseverance alone could make him abandon his cartoon destined for the great council chamber at Florence, of which the celebrated contest of horsemen was but one group; for to him who could organize that composition, Michel Angiolo himself ought rather to have been an object of emulation than of fear: and that he was able to organize it, we may be certain from the remaining sketch in the "Etruria Pittrice" lately published, but still more from the admirable print of it by Edelinck, after a drawing of Rubens, who was Lionardo's great admirer, and has done much to impress us with the beauties of his Last Supper, in the Refectory of the Dominicans at Milan, which he abandoned likewise without finishing the head of Christ, exhausted by a wild chase after models for the heads and hands of the apostles: had he been able to conceive the centre, the radii must have followed of course."

Towards the beginning of the century in which Lionardo da Vinci was born, the use of oil was adopted as a vehicle for painting, and afforded the means of most extensive improvements, particularly in colour and effect. The methods to which the former execution of the art had been restricted (namely, distemper, in colours mixed with size and water, and afterwards fresco), were of a limited nature, especially the latter, in which, no means being given to change or retouch the colours without manifest detriment to the work, the artist was hampered in his plan of conduct and management of design. The invention of oil painting remedied this disadvantage; and as it allowed endless variety in effects as well as disposition of colours, together with complete harmony throughout the whole, the fancy of the artist was now permitted to take its full swing, and to produce enchantments which successive ages have not been sufficient to dissolve or even weaken.

The circumstance of varnishing over pictures which had been painted in water colours is thought, and perhaps justly, to have been that which led to this important discovery. John Van Eyck, who flourished at Brussels in 1410, is the artist to whom the first exercise of painting with colours ground and mixed with oil has been attributed. At all events, if he was not the first who actually applied it to the pur-

poses of his art, it was he who first made effectual use of it. In any other case, his application of the system would not, to use the words of Vanmander, "have made as much noise in the world as the discovery of gunpowder by Bertoldo Schwartz had done near a century before." According to this same writer, the art of painting had been carried into Flanders about the time of Giotto by some Flemings who went to Italy for the purpose of receiving instruction in it; and he goes on to describe it as having been practised "with gum and eggs at its first commencement by Cimabue." The Germans, likewise, acquired the art about the same time; but its most successful progress and achievements were confined to the classic countries of Italy.

"Bartolomeo della Porta, or di S. Marco, the last master of this period, first gave gradation to colour, form, and masses to drapery, and a grave dignity, till then unknown, to execution. If he was not endowed with the versatility and comprehension of Lionardo, his principles were less mixed with base matter, and less apt to mislead him. As a member of a religious order, he confined himself to subjects and characters of piety, but the few nudities which he allowed himself to exhibit show sufficient intelligence and still more style: he foreshortened with truth and boldness, and whenever the figure admitted of it, made his drapery the vehicle of the limb it invests. He was the true master of Raffaelle, whom his tuition weaned from the meanness of Pietro Perugino, and prepared for the mighty style of Michel Angiolo Buonarrotti.

"Sublimity of conception, grandeur of form, and breadth of manner are the elements of Michel Angiolo's style. By these principles he selected or rejected the objects of imitation. As painter, as sculptor, as architect, he attempted (and above any other man succeeded) to unite magnificence of plan and endless variety of subordinate parts with the utmost simplicity and breadth. His line is uniformly grand: character and beauty were admitted only as far as they could be made subservient to grandeur. The child, the female, meanness, deformity, were by him indiscriminately stamped with grandeur. A beggar rose from his hand the patriarch of poverty; the hump of his dwarf is impressed with dignity; his women are moulds of generation; his infants teem with the man; his men are a race of giants. This is the 'terribil via' hinted at by Agostino Caracci, though perhaps as little understood by the Bolognese as by the blindest of his Tuscan adorers, with Vasari at their head. To give the appearance of perfect ease to the most perplexing difficulty was the exclusive power of Michel Angiolo. He is the inventor of epic painting, in that sublime circle of the Sistine chapel, which exhibits the origin, the progress, and the final dispensations of theocracy. He has personified motion in the groups of the cartoon of Pisa; embodied sentiment on the monuments of St. Lorenzo; unravelled the features of meditation in the prophets and sybils of the chapel of Sextus; and in the Last Judgment, with every attitude that varies the human body, traced the master-trait of every passion that sways the human heart. Though as sculptor, he expressed the character of flesh more perfectly than all who went before or came after him, yet he never submitted to copy an individual—Julio the second only excepted, and in him he represented the reigning passion rather than the man. In painting he contented himself with a negative colour, and, as the painter of mankind, rejected all meretricious ornament. The fabric of St. Peter, scattered into an infinity of jarring parts by Bramante and his successors, he concentrated; suspended the cupola, and to the most complex gave the air of the most simple of edifices. Such, take him all in all, was M. Angiolo, the salt of art: sometimes he no doubt had his moments of dereliction, deviated into manner, or perplexed the grandeur of his forms with futile and ostentatious anatomy: he met with armies of copyists, and it has been his fate to have been censured for their folly.

"The inspiration of Michel Angiolo was followed by the milder genius of Raffaelle Sanzio, the father of dramatic painting, the painter of humanity; less elevated, less vigorous, but more insinuating, more pressing on our hearts, the warm master of our sympathies. What effect of human connexion, what feature of the mind, from the gentlest emotion to the most fervid burst of passion, has been left unobserved, has not received a characteristic stamp from that examiner of man? M. Angiolo came to nature, nature came to Raffaelle—he transmitted her features like a lucid glass unstained, unmodified. We stand with awe before M. Angiolo, and tremble at the height to which he elevates us—we embrace Raffaelle, and follow him wherever he leads us. Energy, with propriety of character and modest grace, poise his line and determine his correctness. Perfect human beauty he has not represented;

no face of Raffaelle's is perfectly beautiful; no figure of his, in the abstract, possesses the proportions that could raise it to a standard of imitation: form to him was only a vehicle of character or pathos, and to those he adapted it in a mode and with a truth which leaves all attempts at emendation hopeless. His invention connects the utmost stretch of possibility with the most plausible degree of probability, in a manner that equally surprises our fancy, persuades our judgment, and affects our heart. His composition always hastens to the most necessary point as its centre, and from that disseminates, to that leads back, as rays, all secondary ones. Group, form, and contrast are subordinate to the event, and commonplace ever excluded. His expression, in strict unison with and decided by character, whether calm, animated, agitated, convulsed, or absorbed by inspiring passion, unmixed and pure, never contradicts its cause, equally remote from tameness and grimace: the moment of his choice never suffers the action to stagnate or to expire; it is the moment of transition, the crisis big with the past and pregnant with the future.—If, separately taken, the line of Raffaelle has been excelled in correctness, elegance, and energy; his colour far surpassed in tone, and truth, and harmony; his masses in roundness, and his chiaroscuro in effect—considered as instruments of pathos, they have never been equalled; and in composition, invention, expression, and the power of telling a story, he has never been approached.

"Whilst the superior principles of the art were receiving the homage of Tuscany and Rome, the inferior but more alluring charm of colour began to spread its fascination at Venice, from the pallet of Giorgione da Castel Franco, and irresistibly entranced every eye that approached the magic of Titiano Vecelli of Cador. To no colourist before or after him did nature unveil herself with that dignified familiarity in which she appeared to Titiano. His skill, universally and equally fit for all her exhibitions, rendered her simplest to her most compound appearances with equal purity and truth. He penetrated the essence and the general principle of the substances before him, and on these established his theory of colour. He invented that breadth of local tint which no imitation has attained; and first expressed the negative nature of shade: his are the charms of glazing, and the mystery of reflexes, by which he detached, rounded, connected, or enriched his objects. His harmony is less indebted to the force of light and shade, or the artifices of contrast, than to a due balance of colour, equally remote from monotony and spots His backgrounds seem to be dictated by nature. Landscape, whether it be considered as the transcript of a spot, or the rich combination of congenial objects, or as the scene of a phenomenon, dates its origin from him: he is the father of portrait painting, of resemblance with form, character with dignity, and costume with subordination.

"Another charm was yet wanting to complete the round of art—harmony: it appeared with Antonio Læti, called Correggio, whose works it attended like an enchanted spirit. The harmony and the grace of Correggio are proverbial: the medium which by breadth of gradation unites two opposite principles—the coalition of light and darkness by imperceptible transition, is the element of his style.—This inspires his figures with grace, to this their grace is subordinate: the most appropriate, the most elegant attitudes were adopted, rejected, perhaps sacrificed to the most awkward ones, in compliance with this imperious principle: parts vanished, were absorbed, or emerged in obedience to it. This unison of a whole predominates over all that remains of him, from the vastness of his cupolas to the smallest of his oil pictures.—The harmony of Correggio, though assisted by exquisite hues, was entirely independent of colour: his great organ was chiaro-scuro in its most extensive sense; compared with the expanse in which he floats, the effects of Lionardo da Vinci are little more than the dying ray of evening, and the concentrated flash of Giorgione discordant abruptness. The bland central light of a globe, imperceptibly gliding through lucid demitints into rich reflected shades, composes the spell of Correggio, and affects us with the soft emotions of a delicious dream."

The patronage which the art had enjoyed in Italy, from the commencement of its restoration, kept pace with its progress, and was at length perfected by Julius II. and Leo X. at Rome, and by the truly illustrious family of the Medici at Florence. Cosmo di Medici, at the same time that his care and thoughts were directed to the state affairs of the latter province, still found time and means to watch over the developement of the fine arts. His grandson Lorenzo (surnamed the Magnificent), who became his successor A. D. 1464, carried these elegant tastes to a still greater extent, and increased, among other

praiseworthy actions, that mass of ancient relics which the industrious search prescribed by his predecessor had collected, and which adorned the Medici palace. Desirous of stimulating his countrymen to a successful rivalry with these invaluable treasures, Lorenzo threw open his gardens, wherein they had been deposited, as a school for study, and honoured both his own discrimination and the consummate ability of the artist by placing Michel Angiolo at the head of it. By the influence of this potentate, principally, the council hall of the Florentine republic (which had been shortly before rebuilt), was adorned with paintings by Michel Angiolo and Lionardo da Vinci, each being allotted one side of the hall for the exercise of his talents. This may be considered as the first instance of any moment, of public civil employment being given to the painters of Italy; their chief exertions having been previously restricted to the decoration of religious edifices.

The internal discords which about this period began to engross the attention of the Florentines prevented them from continuing to patronize the arts as they had done; and, added to this, Julius II., who then filled the papal chair, aware of the splendour and glory attached to a state by the successful cultivation of the fine arts, summoned to Rome both Raffaelle and Michel Angiolo, who, under his auspices, began those inimitable works in the Vatican which every judicious artist or amateur both thinks and speaks of with enthusiasm. Leo X., his successor, was son of Lorenzo di Medici, and thus possessed a double stimulus, both from the example of his father and his predecessor, to encourage and preside over art. We use but weak words when we say this stimulus was not disregarded. It served to direct the efforts of painting towards the service and splendour of the church over which he swayed, of his rank as a secular sovereign, and of himself as one of the Medici.

Thus was the principal seat of the arts transferred from Florence to Rome; which gradually became, in consequence of its many combined advantages, a complete university of art, and the resort of all such as were ambitious to excel therein; and thus may be said to have terminated in the reign of Leo X. the second grand epoch of the art.

"The resemblance which marked the two first periods of ancient and modern art vanishes altogether as we extend our view to the consideration of the third, or that of refinement, and the origin of schools. The preeminence of ancient art, as we have observed, was less the result of superior powers, than of simplicity of aim and uniformity of pursuit. The Helladic and the Ionian schools appear to have concurred in directing their instruction to the grand principles of form and expression: this was the stamen which they drew out into one immense connected web. The talents that succeeded genius, applied and directed their industry and polish to decorate the established system, the refinements of taste, grace, sentiment, colour, adorned beauty, grandeur, and expression. The Tuscan, the Roman, the Venetian, and the Lombard schools, whether from incapacity, want of education, of adequate or dignified encouragement, meanness of conception, or all these together, separated, and in a short time substituted the medium for the end. Michel Angiolo lived to see the electric shock which his design and style had given to art, propagated by the Tuscan and Venetian schools, as the ostentatious vehicle of puny conceits and emblematic quibbles, or the palliative of empty pomp and degraded luxuriance of colour. He had been copied but was not imitated by Andrea Vannucchi, surnamed del Sarto, who in his series of pictures on the life of John the Baptist, in preference adopted the meagre style of Albert Durer. The artist who appears to have penetrated deepest to his mind was Pelegrino Tibaldi, of Bologna; celebrated as the painter of the frescoes in the Academic Institute of that city, and as the architect of the Escurial under Philip II. The compositions, groups, and single figures of the Institute exhibit a singular mixture of extraordinary vigour and puerile imbecility of conception, of character and caricature, of style and manner. Polypheme groping at the mouth of his cave for Ulysses, and Æolus granting him favourable winds, are striking instances of both: than the Cyclops, Michel Angiolo himself never conceived a form of savage energy, with attitude and limbs more in unison; whilst the god of winds is degraded to a scanty and ludicrous semblance of Thersites, and Ulysses with his companions travestied by the semibarbarous look and costume of the age of Constantine or Attila; the manner of Michel Angiolo is the style of Pelegrino Tibaldi; from him Golzius, Hemskirk, and Spranger borrowed the compendium of the Tuscan's peculiarities. With this mighty talent, however, Michel Angiolo seems not to have been acquainted: but by that unaccountable weakness inci-

dent to the greatest powers, and the severe remembrancer of their vanity, he became the superintendent and assistant tutor of the Venetian Sebastiano, and of Daniel Ricciarelli, of Volterra; the first of whom, with an exquisite eye for individual, had no sense for ideal colour, whilst the other rendered great diligence and much anatomical erudition useless, by meagreness of line and sterility of ideas: how far Michel Angiolo succeeded in initiating either in his principles, the far famed pictures of the Resuscitation of Lazarus, by the first, (once in the cathedral of Narbonne, and now one of the chief ornaments of the British National Gallery), and the fresco of the Descent from the Cross (in the church of La Trinità del Monte), at Rome, by the second, sufficiently evince: pictures which combine the most heterogeneous principles. The group of Lazarus in Sebastiano del Piombo's, and that of the women, with the figure of Christ, in Daniel Ricciarelli's, not only breathe the sublime conception that inspired, but the master hand that shaped them: offsprings of Michel Angiolo himself, models of expression, style, and breadth, they cast on all the rest an air of inferiority, and only serve to prove the incongruity of partnership between unequal powers; this inferiority however is respectable, when compared with the depravations of Michel Angiolo's style by the remainder of the Tuscan school, especially those of Giorgio Vasari, the most superficial artist, and the most abandoned mannerist of his time, but the most acute observer of men, and the most dextrous flatterer of princes. He overwhelmed the palaces of the Medici and of the popes, the convents and churches of Italy, with a deluge of mediocrity, commended by rapidity and shameless 'bravura' of hand: he alone did more *work* than all the artists of Tuscany together, and to him may be truly applied, what he had the insolence to say of Tintoretto, that he turned the art into a boy's toy."

Giulio Romano was the most eminent of the pupils of Raffaelle; but though, like his illustrious master, impressed with the stupendous views and style of Buonarotti, he had by no means equal force of judgment, or delicacy of taste, to guide him in his application of these qualities. It is not so much from his tutored works in the Vatican that we are to judge of the best achievements of Romano as from the grand conceptions, the pathetic or sublime allegories, and the luxurious reveries which constitute the principal charm of the palace del T, near Mantua: had the artist united purer taste with loftiness of imagination, the magnitude of these performances would perhaps have distanced all competition; but, as it is, they have been likened to a mighty stream, sometimes flowing in a full and limpid vein, but oftener turbid with rubbish.

Besides this celebrated artist, Parmegiano, Tintoretto, Polydori, and Caravaggi were amongst the most skilful of those who continued to uphold the practice of art with ability. "No artist ever painted his own mind so powerfully as did Michel Angiolo Amerigi, surnamed Il Caravaggi. To none did nature ever set limits with a more decided hand. Darkness gave him light; into his melancholy cell light stole only with a pale reluctant ray, or broke on it as flashes in a stormy night. The most vulgar forms he recommended by ideal light and shade, and a tremendous breadth of manner."

Titian and Correggio had, in point of the adoption of their respective principles, fates widely different. That of the former being less pure in itself, and less decided in its object of imitation, than either Angiolo's or Raffaelle's, suffered comparatively less from the various applications of it by his followers. It had besides for its support the irresistible fascinations of colour, which speak to every spectator, and hence was successfully pursued for a considerable time. But the principle of Correggio was not calculated for this species of longevity. It vanished with its author. His expansive breadth of light; his inexpressible grace (so much talked of, yet so little understood); his perfect harmony and depth of tone have never been otherwise than partially imitated. Parmegiano may be considered to have imbibed his style the most fully. This admirable artist was, like Raffaelle and Giorgione, abstracted from this world in early manhood, and perhaps before the complete capabilities of his mind had been developed.

Such was the condition of the art when, towards the end of the sixteenth century, the Caracci (Ludovico, Agostino, and Annibale), founded at Bologna that Eclectic school, the aim of which was, by selecting the beauties, correcting the faults, supplying the defects, and avoiding the extremes of the different styles then practised, to establish a perfect system. The plan was laid down by Agostino Caracci in the following sonnet:

> Chi farsi un buon Pittor cerca, e desia,
> Il disegno di Roma habbia alla mano,
> La mossa coll' ombrar Veneziano,
> E il degno colorir di Lombardia.

Di Michel' Angiol la terribil via,
Il vero natural di Tiziano,
Del Correggio lo stil puro, e sovrano,
E di un Rafel la giusta simetria.

Del Tibaldi il decoro, e il fondamento,
Del dotto Primaticcio l'inventare,
E un po di gratia del Parmigianino.

Ma senza tanti studi, e tanto stento,
Si ponga l'opre solo ad imitare,
Che qui lasciocci il nostro Niccolino.

"Take," says Agostino, "the design of Rome, Venetian motion and shade, the dignified tone of Lombardy's colour, the terrible manner of Michel Angiolo, the just symmetry of Raffaelle, Titiano's truth of nature, and the sovereign purity of Correggio's style: add to these the decorum and solidity of Tibaldi, the learned invention of Primaticcio, and a little of Parmegiano's grace: but to save so much study, such weary labour, apply your imitation to the works which our dear Nicolo has left us here."

This tone of advice has, it must be confessed, very much the character of "a good receipt for making blacking;" and it is the more curious that it should be so, inasmuch as the object proposed by these celebrated relatives, although not effectually attained, yet was sufficiently so to arrest for awhile the backward progress of the art. Ludovico, indeed, instead of blindly following the dictates of any master or masters, was the decided pupil of nature; by the simplicity and purity of his taste and execution not only surpassing his kinsmen, Annibale and Agostino, but in a considerable degree restoring the art once more to its first and greatest principles. Annibale, it is true, disputed the point vigorously by his energetic execution and academic acquirement; but the work on which his fame chiefly reposes (the gallery of the Farnese palace at Rome) proves that, if superior to both of his kinsmen in those accomplishments, he was inferior to either in taste, sentiment, or discrimination.

Sir Joshua Reynolds, who saw the works of Ludovico Caracci at Bologna, holds him out, in his Discourses, as the best model for what is more specifically denominated *style* in painting. "Ludovico Caracci," says he, (I mean in his best works), appears to me to approach the nearest to perfection. His unaffected breadth of light and shadow, the simplicity of colouring, which, holding its proper rank, does not draw aside the least part of the attention from the subject, and the solemn effect of that twilight which seems diffused over his pictures appears to me to correspond with grave and dignified subjects better than the more artificial brilliancy of sunshine which enlightens the pictures of Titian."

The school formed by the Caracci for the improvement of their art was entitled *L'Academi degli Desiderosi*, but is better recognised as the Academy of the Caracci, and gave rise to many artists of high name and merited celebrity. But these individuals soon threw aside, at least as completely as they could, the heterogeneous principle on which it was founded, each following the dictates of his own uncontroled imagination, and differing from his fellow students as well in manner as in objects of imitation. The greatest of these names is that of Guido Rheni, whose grace, although exquisite, was yet artificial; his female forms, more especially, may be considered as abstracts of antique beauty, attended by languishing attitudes, and dressed in voluptuous attire. Domenichino comes next, who, unusually obedient to the prescription of his master, strove to combine with the expression of Raffaelle the energy of Annibale Caracci, and the colour of Ludovico. Schidone, Lanfranco, Guercino, each studied in the school of the Caracci; but the indefinite nature of its system soon wrought its downfall.

From this period is to be dated the rapid decline of the art in Italy. Da Cortona and Giordano both possessed great powers, but abused them by yielding implicitly to the tasteless suggestions of their employers. Nicholas Poussin, a Frenchman, but grafted on the Roman stock, placed himself in the gap, and endeavoured to stem the torrent of corrupted taste. He reverted, for his models, to the pure source of Grecian art: indeed, such was his attachment to the ancients, that he has been said to have copied their relics rather than imitated their spirit. The costume, the mythology, the rites of antiquity, were his elements; his scenery, his landscape, are pure classic ground. The wildness of Salvator Rosa opposes a striking contrast to the classic regularity of Poussin. Terrific and grand in his conceptions of inanimate nature, he was reduced to attempts of hiding, by boldness of hand, his inability of exhibiting her impassioned, or in the dignity of character. With Poussin and Salvator closes all record worth notice of the history of the art in Italy.

The first name which claims our attention, in noticing the progress of painting in Germany, is that of Albert Durer. This man's talents were various, his composi-

tions the result of deep study, his thoughts ingenious, his colours brilliant. On the other hand, he has been blamed for stiffness and aridity in his outlines, for the absence of taste or grandeur in his expression, for ignorance of costume, of aerial perspective, and of gradation of colours. Lucas of Leyden was Durer's most successful rival, unless we except Holbein, who, if he did not equal him in composition, unquestionably surpassed him, and that greatly, in portrait.

The history of the art in the neighbouring countries of Flanders and Holland is not distinct from that of Germany until the appearance of those two "meteors of art" Peter Paul Rubens and Rembrandt Van Rhyn. The former of these extraordinary men produced an immense number of works. He excelled alike in historical painting, in portrait and landscape, in fruit, flowers, and animals. He both invented and executed with the utmost facility; and, to show the extent of his powers, frequently made a great number of sketches of the same subject altogether different, and without allowing any time to elapse between them. His figures appear to be the exact counterpart of his conceptions, and their creation nothing more than a simple act of the will. He had great knowledge of anatomy, but was often hurried away by the impetuosity of his imagination, and his ardour for execution. He preferred splendour to beauty of form, and occasionally sacrificed correctness of design to the magic of colour. In short, the qualities of Rubens, generally speaking, indicate a mind full of fire and vigour rather than accuracy or profound thought.

It appears evident, from the works of Rubens, that his method of painting was to lay the colours in their place one at the side of another, and mix them afterwards by a slight touch of the pencil. Titian mingled his tints as they are in nature, in such a manner as to render it impossible to discover where they began or terminated; the effect is evident, the labour is concealed. Thus Rubens is more dazzling, and Titian more harmonious. In this respect, the first excites the attention, the second fixes it. The carnations of Titian (see CARNATION), resemble the blush of nature; those of Rubens are brilliant and polished like satin, and sometimes even his tints are so strong and separate, as to have the effect of spots.

"Rubens," says Sir Joshua Reynolds, "is a remarkable instance of the same mind being seen in all the various parts of the art. The whole is so much of a piece, that one can scarce be brought to believe but that, if any one of them had been more correct and perfect, his works would not be so complete as they appear. If we should allow a greater purity and correctness of drawing, his want of simplicity in composition, colouring, and drapery would appear more gross." He was truly the father of Flemish art, so remarkable for brilliancy of colouring, for exactness of drawing, and the magic of their *chiaro-scuro*. To these may be added profound arrangement, though not exercised on the most beautiful forms; a composition not destitute of grandeur, a certain air of nobleness in the figures, strong and natural expression; in short, to speak generally, a species of art, neither copied from the ancients, nor from the Roman or Lombard schools, and indeed unknown to any other part of the world; and which, during the course of the seventeenth century, furnished those countries wherein it arose with innumerable works of the greatest perfection in their kind.

Rembrandt was a genius of the first order, if we except what relates to form, and in him the choice of low figures is the more offensive, as his compositions frequently required the very opposite. As his father was a miller near Leyden, his education must altogether have depended on the exertion of great talents, and the study of nature. He studied the grotesque figure of a Dutch peasant, or the servant of an inn, with as much application as the greatest masters of Italy would have studied the Apollo Belvidere or the Venus de Medici. In spite, however, of the most portentous deformity, and without dwelling on the spell of his *chiaro-scuro*, such were his powers of nature, such the grandeur, pathos, or simplicity of his composition, from the most elevated or extensive arrangement to the meanest or most homely, that the best cultivated eye, the purest sensibility, and the most refined taste are equally fascinated by them. Like Shakspeare he combined transcendant excellence with many even unpardonable faults, and reconciled us to them. "He possessed the complete empire of light and shade, and of all the tints which float between them. He tinged his pencil, with equal success, in the cool of dawn, in the noontide ray, in the livid flash, in evanescent twilight, and rendered darkness visible. Though made to bend a steadfast eye on the bolder phenomena of nature, he knew how to follow her into her calm-

est abodes, gave interest to insipidity or baldness, and plucked a flower in every desert."

"Rembrandt's manner of painting (says M. Descamps) is a kind of magic. No artist knew better the effects of different colours mingled together, nor could better distinguish those which did not agree from those which did. He placed every tone in its place with so much exactness and harmony, that he needed not to mix them, and so destroy what may be termed the flower and freshness of the colours. He made the first draft of his pictures with great precision, and with a mixture of colours altogether particular. He proceeded on his first sketch with vigorous application, and sometimes loaded his lights with so great a quantity of colour, that he seemed to model rather than to paint. His workshop was occasionally made dark, and he received, through a hole, the light, which fell as he chose to direct it. On particular occasions, he placed behind his model a piece of cloth of the same colour with the ground he wanted, and this piece of cloth receiving the same ray which enlightened the head, marked the difference in a sensible manner, and allowed the painter the power of augmenting it according to his principles."

It is difficult to determine the progress of painting in France. Miniature painting, and painting on glass were early cultivated in that country; and in these two kinds, the Italians had often recourse to the French artists. The art, for some time encouraged by Francis I., fell into a state of languor from which it did not recover till the reign of Louis XIII. Jacques Blanchard, who has been called the French Titian, flourished about this period; but, as he died young, and without educating any pupils to perpetuate his manner, he cannot be regarded as the master of any school. We have already spoken of Nicholas Poussin, in our review of Italian art, to which he more properly belonged. But the seeds of mediocrity which the Caracci had attempted to scatter over Italy found a more congenial soil, and reared an abundant harvest, in France: "to mix up a compound from something of every excellence in the catalogue of art, was the principle of their theory, and their aim in execution. It is in France where Michel Angiolo's right to the title of a painter was first questioned. The *fierceness* of his line, as they call it, the purity of the antique, and the characteristic forms of Raffaelle are only the road to the academic vigour, the librated style of Annibale Caracci, and from that they appeal to the model; in composition they consult more the artifice of grouping, contrast, and richness, than the subject or propriety; their expression is dictated by the theatre. From the uniformity of this process, not to allow that the school of France offers respectable exceptions would be unjust; without recurring again to the name of Nicholas Poussin, the works of Eustache le Sueur, Charles le Brun, Sebastien Bourdon, and sometimes Pierre Mignard, contain original beauties and rich materials. Le Sueur's series of pictures in the Chartreux exhibit the features of contemplative piety, in a purity of style and a placid breadth of manner that moves the heart. His dignified martyrdom of St. Laurence, and the burning of the magic books at Ephesus, breathe the spirit of Raffaelle. The powerful comprehension of a whole, only equalled by the fire which pervades every part of the battles of Alexander, by Chas. le Brun, would entitle him to the highest rank in history, had the characters been less mannered, had he not exchanged the Argyraspids and the Macedonian phalanx for the compact legionaries of the Trajan pillar; had he distinguished Greeks from barbarians rather by national feature and form than by accoutrement and armour. The seven works of charity by Seb. Bourdon teem with surprising, pathetic, and always novel images; and in the plague of David, by Pierre Mignard, our sympathy is roused by energies of terror and combinations of woe, which escaped Poussin and Raffaelle himself.

"The obstinacy of national pride, perhaps more than the neglect of government or the frown of superstition, confined the labours of the Spanish school, from its obscure origin at Sevilla to its brightest period, within the narrow limits of individual imitation. But the degree of perfection attained by Diego Velasquez, Joseph Ribera, and Murillo, in pursuing the same object by means as different as successful, impresses us with deep respect for the variety of their powers.

"That the great style ever received the homage of Spanish genius, appears not; neither Alfonso Beruguette nor Pelegrino Tibaldi left followers: but that the eyes and the taste, fed by the substance of Spagnuoletto and Murillo, should without reluctance have submitted to the gay volatility of Luca Giordano, and the ostentatious flimsiness of Sebastian Conca, would be matter of surprise, did we not see the same

principles successfully pursued in the plafonds of Antonio Raphael Mengs, the painter of philosophy, as he is styled by his biographer D'Azara. The cartoons of the frescoes painted for the royal palace at Madrid, representing the apotheosis of Trajan and the temple of Renown, exhibit less the style of Raffaelle in the nuptials of Cupid and Psyche in the Farnesina, than the gorgeous but empty bustle of Pietro da Cortona."

We will conclude this sketch of the history of painting by a brief notice of its progress in our own country.

But little is known respecting the existence of painting in England previously to the reign of Henry VIII., who patronized the talents of Holbein and Torregiano, and invited Titian to visit his court. It was but a short period before that these islands had begun to cultivate the elegant arts of life, and to shake off the influence of rude and ignorant manners. The choice of subjects, however, prescribed by Henry and his courtiers to those eminent men who then resided in England was unquestionably to be lamented, and suffers extremely from a contrast with what was done by his rival, Francis I., the French king, who employed and enriched Andrea del Sarto, Rustici, Rosso, Primaticcio, Cellini, and Niccolo, not to aggregate a mass of painted and chiseled treasures for the mere gratification of his own vanity, but to scatter the seeds of real taste throughout France; while, on the other hand, Torregiano and Holbein under Henry, as well as Frederigo Zucchero under Elizabeth, were condemned to gothic work and portrait painting. The Reformation, however great the satisfaction with which the English people justly regard it, was, without doubt, highly injurious to the cultivation of the principles of art. The stern spirit of the early reformers led them not only into a total disregard, but into an absolute condemnation, of every thing ornamental or superfluous; and the arts of painting and sculpture, more particularly, owing their principal splendour and success to the munificent patronage of the mother church, fell under the peculiar and powerful ban of her revolted daughter. If, on the contrary, at this juncture, when the national spirit was remodelled, and when that stupendous change laid open almost all that was grand in intellect or spirited in action, the fine arts had participated in the vigorous upspringing, and had received the encouragement instead of the reprobation of those lofty-minded theologians, it is more than probable that England would at this day have had to boast, in addition to her brilliant and recognised claims on the score of literature and science, the glory of exhibiting a national and superior style of historical painting. But, as it was, the injunction of Henry against images (which had been made the instruments of idolatrous delusions in churches), and still more the rigid edicts of Edward VI. and Elizabeth against statues and pictures in general, while they suddenly checked the career of historical and religious painting, seem to have set a mark of disgrace on the arts themselves, and to have left them, for a considerable length of time, a prey to indifference and scorn.

Charles I., it is true, strove to introduce a feeling for the art; and whilst Rubens sojourned amongst us in the character of an ambassador from the court of Madrid, employed him to paint the cieling of his newly erected banqueting room (now the chapel) at Whitehall. He also, by countenancing and patronising that prince of portrait painters, Vandyck, as well as other foreigners of talent, conferred on his country a treasure for which we trust she is at length grateful. Charles collected a very considerable gallery of pictures, and, at the instance of Rubens, bought the invaluable cartoons of Raffaelle, now the chief and envied ornament of Hampton Court: he likewise, at a cost of £20,000, purchased the cabinet of the Duke of Mantua, and commissioned an artist to copy for him the works of Titian in Spain. But the exertions of Charles were frustrated and intercepted by his unhappy destiny; and the whole of his artistical collection was sold and dispersed by the parliament of 1643, which issued a mandate "that all pictures which had the representation of the Saviour or the Virgin Mary in them should be burnt." As if to complete this unfortunate distribution, so prejudicial to the interests of the art in England, a large part of this magnificent collection, which had been on the Restoration replaced in the palace of Whitehall, was utterly destroyed by the fire which consumed that edifice.

Charles II., with the cartoons of Raffaelle in his possession, and with the splendid pictorial ornaments of Whitehall before his eyes, permitted the absurdities of Verrio, and the dull mimicries of Gennaro to render unsightly the walls of his palaces, whilst the genuine talent of Sir Peter Lely was degraded in painting the Cymons or Iphigenias of his voluptuous court. This distinguished artist, the rival, and in many instances the successful rival

of Vandyck, was succeeded by Sir Godfrey Kneller, who, with undoubted natural abilities, suffered the love of gain, when those abilities had lifted him into notice, to pervert his taste and deaden his ambition.

In historical painting no British artist had appeared to rival the performances of foreign excellence until Sir James Thornhill, born in 1677, arose to dispute the honours of the palette with La Guerre, whom many among our nobility had employed to decorate their halls and staircases. Sir James Thornhill received a commission from the state to decorate St. Paul's Cathedral and Greenwich Hall, in which performances he was assisted by a German artist of the name of André. It will not, however, be imagined that much value was set on the talents of these gentlemen, when we state that Sir James's engagement was at £2. per square yard! Thornhill's merits, indeed, as an historical painter, cannot be said to demand any very great commendation; still he was the father of English art in that particular, and for a long time had no successful imitator. "In the commencement of the reign of George I. (says Sir Horace Walpole), the arts of England were sunk almost to the lowest ebb." Portraiture, it is true, had been successfully practised by Dobson, Riley, Cooper, Greenhill, Jervas, and Richardson, but by none with any remarkable eminence.

It was not, however, to continue always thus: and the time at length arrived when the English artists appeared not only desirous but capable of raising the character of their country in this respect, at least, to a level with that of any other nation of Europe.

The principal difficulty in the outset of this event was to rescue the art from the degrading influence of a vicious taste, to retrace the steps of our predecessors (or rather to burst the bandages in which they had enthralled us), and resort at once to the original principle of imitation; which, when pure and select, is the only sound basis of the art. The first step towards this reformation was the establishment of a school for drawing from the living figure. This had been begun by Sir James Thornhill, in most inexplicable conjunction with Sir Godfrey Kneller, who, one would imagine, from his latter works, had left all consideration of the value of such a thing far behind. Thus, however, he assisted in laying the foundation of a remedy for the evil which he, more than any other man, had occasioned. This school Sir James continued at his own house in the Piazza for some years. His death, in 1734, obliged the artists to procure another situation, which was not effected without some difficulty; for the people were so unprepared to regard the study from the naked figure as necessary to artists, that their meetings were even suspected to be held for immoral purposes. Another school was at length formed by Michael Moser, a native of Schaffhausen, and a chaser by profession, and six other artists, principally foreigners, the management resting with Moser. After awhile, they were visited by Hogarth and others, and a larger body was formed in consequence, who established themselves in Peter's Court, St. Martin's Lane, in the year 1739. Having acquired some property by combined exhibitions of their works, they solicited a charter of incorporation, and the scheme being sanctioned by his late Majesty, their charter was granted in 1765. But dissensions arising in the body, a secession of many of its principal members took place, and the result was the establishment of the Royal Academy in 1768, under the more immediate patronage of the king; Sir Joshua Reyholds being nominated its first president. *Introduction to Edwards's Anecdotes of Painters.*

The general taste of the country was, in fact, awakened and purified with respect to art, and, on the success of Hogarth, Reynolds, and Wilson, several societies were formed throughout the kingdom for the avowed purpose of patronising and cultivating it.

Richardson, whose tracts ought to be known to every student and amateur of painting, died in 1745, at the advanced age of 80. He was a bad painter, but his treatises on the art are full of enthusiasm, and of judicious observations on the theory of the art. Of one of these Sir Joshua Reynolds declared, that it had confirmed him in his love of the art, and elevated his ideas of its professors. Richardson contended strenuously for the propriety of painting portraits in the costume of their time; thus striking at the absurd system of flowing robes which had been adopted by Kneller. This suggestion of Richardson's, dictated by common sense, produced the happiest effects. The nonsensical draperies which had invested the represented persons of the gentlemen, together with the ungraceful silk robe which they contrived to throw *negligently* over the shoulders of the ladies, were laid aside; and the succeeding portrait painters, headed by a son-in-law of Richardson (Hudson), and a Frenchman of the name of Van Loo

(brother of Carle Van Loo), began to dress their sitters in all the formality of the day, Hudson being assisted by a Fleming of the name of Van Alken, in the representation of the silks and laces. Nor did the reformation stop here: it extended into the region of historical painting: and Hayman, the successor of Sir James Thornhill, perceived the propriety of retaining the costume properly appertaining to those figures introduced into his paintings; no longer, by an unmeaning affectation, changing them into Grecian heroes or Roman centurions.

This period might be denominated the infancy of English art; and it is not a little curious, that at the time when painting was verging towards a state of hopeless decline all over the Continent of Europe, it should have revived, and that to no small purpose, in these islands, the inhabitants of which had been frequently taunted by foreigners as unable to execute a fine painting.

We shall not dwell on its incipient state of improvement; indeed, the commendations bestowed on the painters alluded to above regard the *principle of imitation* rather than the thing imitated, since nothing could possibly be more untasteful or repulsive than the stiff, starch, and unsightly *uniform* (both male and female) of those days. But the principle of attention to actual representation once established, it soon produced the fruits of a better taste in the art generally; and, accordingly, it was not long before the matchless talent of HOGARTH beamed forth in unapproachable splendour to gild the onward progress of the muse of painting, and to herald the appearance of a kindred genius in the person of SIR JOSHUA REYNOLDS.

Hogarth traced out a department in painting which was at once novel and exciting—and he filled it:—

"Within that circle none durst walk but he!"

His pictures are pregnant with meaning. Each one tells you a whole history. He had the faculty to grasp all the minutiæ of the scene which he placed before you—nothing was suffered to escape.

"It is the fashion," says an admirable living critic (Mr. Charles Lamb), "with those who cry up the great historical school in this country, to exclude Hogarth from that school, as an artist of an inferior and vulgar class. Those persons seem to me to confound the painting of subjects in common or vulgar life with the being a vulgar artist. The quantity of thought which Hogarth crowds into every picture would alone *unvulgarize* every subject which he might choose. Let us take the lowest of his subjects, the print called *Gin Lane*. Here is plenty of poverty and low stuff to disgust upon a superficial view: and accordingly, a cold spectator feels himself immediately disgusted and repelled. I have seen many turn away from it, not being able to bear it. The same persons would perhaps have looked with great complacency upon Poussin's celebrated picture of the *Plague at Athens*. Disease and death and bewildering terror, in *Athenian garments*, are endurable, and come, as the delicate critics express it, within the 'limits of pleasurable sensation.' But the scenes of their own St. Giles's, delineated by their own countryman, are too shocking to think of. Yet if we could abstract our minds from the fascinating colours of the picture, and forget the coarse execution (in some respects) of the print, intended as it was to be a cheap plate, accessible to the poorer sort of people, for whose instruction it was done, I think we could have no hesitation in conferring the palm of superior genius upon Hogarth, comparing this work of his with Poussin's picture. There is more of imagination in it—that power which draws all things to one,—which makes things animate and inanimate, beings with their attributes, subjects and their accessories, take one colour, and serve to one effect. Every thing in the print, to use a vulgar expression, *tells*. Every part is full of 'strange images of death.' It is perfectly amazing and astounding to look at. Not only the two prominent figures, the woman and the half-dead man, which are as terrible as any thing which Michel Angiolo ever drew, but every thing else in the print contributes to bewilder and stupify,—the very houses, as I heard a friend of mine express it, tumbling all about in various directions, seem drunk—seem absolutely reeling from the effect of that diabolical spirit of frenzy which goes forth over the whole composition.—To show the poetical and almost prophetical conception in the artist, one little circumstance may serve. Not content with the dying and dead figures, which he has strewed in profusion over the proper scene of the action, he shows you what (of a kindred nature) is passing beyond it. Close by the shell, in which, by direction of the parish beadle, a man is depositing his wife, is an old wall, which, partaking of the universal decay around it, is tumbling to pieces.

Through a gap in this wall are seen three figures, which appear to make a part in some funeral procession which is passing by on the other side of the wall, out of the sphere of the composition. This extending of the interest beyond the bounds of the subject could only have been conceived by a great genius.

"The faces of Hogarth have not a mere momentary interest, as in caricatures, or those grotesque physiognomies which we sometimes catch a glance of in the street, and, struck with their whimsicality, wish for a pencil and the power to sketch them down; and forget them again as rapidly,—but they are permanent abiding ideas. Not the sports of nature, but her necessary eternal classes. We feel that we cannot part with any of them, lest a link should be broken.

"It is worthy of observation, that he has seldom drawn a mean or insignificant countenance. If there are any of that description, they are in his *Strolling Players*, a print which has been cried up by Lord Orford as the richest of his productions, and it may be, for what I know, in the mere lumber, the properties, and dead furniture of the scene; but in living character and expression it is (for Hogarth) lamentably poor and wanting; it is, perhaps, the only one of his performances at which we have a right to feel disgusted. Hogarth's mind was eminently reflective; and, as it has been well observed of Shakspeare, that he has transfused his own poetical character into the persons of his drama (they are all more or less *poets*), Hogarth has impressed a *thinking character* upon the persons of his canvass. This remark must not be taken universally. The exquisite idiotism of the little gentleman in the bag and sword beating his drum in the print of the *Enraged Musician*, would of itself rise up against so sweeping an assertion. But I think it will be found to be true of the generality of his countenances. The knife-grinder and Jew flute player in the plate just mentioned may serve as instances, instead of a thousand. They have intense thinking faces, though the purpose to which they are subservient by no means required it; but indeed it seems as if it was painful to Hogarth to contemplate mere vacancy or insignificance.

"This reflection of the artist's own intellect from the faces of his characters, is one reason why the works of Hogarth, so much more than those of any other artist, are objects of meditation. Our intellectual natures love the mirror which gives them back their own likenesses. The mental eye will not bend long with delight upon vacancy.

"Another line of eternal separation between Hogarth and the common painters of droll or burlesque subjects, with whom he is often confounded, is the sense of beauty, which in the most unpromising subjects seems never wholly to have deserted him. 'Hogarth himself,' says Mr. Coleridge, from whom I have borrowed this observation, speaking of a scene which took place at Ratzeburg, 'never drew a more ludicrous distortion, both of attitude and physiognomy, than this effect occasioned: nor was there wanting beside it one of those beautiful female faces which the same Hogarth, *in whom the satirist never extinguished that love of beauty which belonged to him as a poet*, so often and so gladly introduces as the central figure in a crowd of humorous deformities, which figure (such is the power of true genius) neither acts nor is meant to act as a contrast; but diffuses through all, and over each of the group, a spirit of reconciliation and human kindness; and even when the attention is no longer consciously directed to the cause of this feeling, still blends its tenderness with our laughter: and *thus prevents the instructive merriment at the whims of nature, or the foibles or humours of our fellow-men, from degenerating into the heart-poison of contempt or hatred.*' To the beautiful females in Hogarth, which Mr. C. has pointed out, might be added, the frequent introduction of children (which Hogarth seems to have taken a particular delight in) into his pieces. They have a singular effect in giving tranquillity and a portion of their own innocence to the subject. The baby riding in its mother's lap, in the *March to Finchley* (its careless innocent face placed directly behind the intriguing time-furrowed countenance of the treason-plotting French priest), perfectly sobers the whole of that tumultuous scene. The boy mourner winding up his top with so much unpretending insensibility in the plate of the *Harlot's Funeral* (the only thing in that assembly that is not a hypocrite) quiets and soothes the mind that has been disturbed at the sight of so much depraved man and woman kind."

Sir Joshua Reynolds was the first President of the Royal Academy; and on his return from Rome, at a previous part of his life, carried the art (at least as far as regards portrait painting) to its very high-

est point of perfection. The life, the grace, the truth of his portraits have, for a long series of years, demanded and received the tribute of universal admiration. His best specimens are perhaps inferior to no pictures of the same kind in existence, and in some points may be said to exceed the performances of any preceding artist. He not only appears to have always aspired to attain the highest excellence of colouring, but in very many instances he did attain it; there being no one particular in which, generally speaking, he left his contemporaries so far behind him as in the richness and mellowness of his tints, when his colours were successful and permanent.

Though the landscapes Sir Joshua has given in the background of many of his portraits are eminently beautiful, he seldom exercised his hand in regular landscape painting; but in the historical department he took a wider range; and by his successful exertions in that higher branch of his art, he not only enriched various cabinets at home, but extended the fame of the English school to foreign countries.

And here it may not be amiss to observe upon the notion which prevails of the colouring having faded and perished in the *majority* of Sir Joshua Reynolds's works. This is not correct: far the greater part of his pictures preserve their original hue, and are in perfect preservation. Those which have failed have been mentioned again and again, and thus have been multiplied in the imaginations of connoisseurs. —Nor should it be forgotten, that the pictures of other considerable painters have not been more durable than his. As many perished pictures of Gainsborough are, it has been affirmed, to be found in cabinets as of Sir Joshua Reynolds. Even the great colourists of the continent were not wholly free from this defect. Several pictures of Titian and Vandyck, and more particularly of the exquisite French painter, Watteau, have entirely lost that brilliancy which, without doubt, they once possessed.

What Reynolds did for portrait painting, his distinguished contemporary, Wilson, did for landscape. He also had studied at Rome, and brought home from thence a refined taste, and a power of execution at once chaste, glowing, and brilliant: while, in the historical department, Sir Joshua's successor, the late lamented Mr. West, without rivalling either of the three great names just mentioned, yet displayed sufficient ability to throw completely into the background what had been previously produced by the successors of Sir James Thornhill, Hayman, Pine, and Whale. Besides West, we cannot forbear to make honourable mention of the names of Romney, Opie, and Barry.

The present state of painting in this country is very encouraging to the lover of art. In portrait, besides the highly-gifted president of the academy, Sir Thomas Lawrence, we have several other eminent professors: in landscape and marine subjects, Turner and Callcott are at the head of a numerous body of followers. The pencil of Wilkie throws a brilliant lustre over both the humorous and pathetic departments of art; and in the arduous walk of history (a walk of art which, although it is entitled, when successfully pursued, to the highest honours, is too often followed without either profit or distinction), there are several names which we might select, whose bearers appear to us qualified to elevate the national reputation far higher than it has ever hitherto been raised. For the truth of these observations, we need only appeal to the annual exhibitions both at Somerset House and at the British Institution.

It would be beyond the limit of this work to go much at large into the theory and practice of the art of painting. We should, however, deem this article incomplete did we not subjoin a few heads of illustration as to the principles of the art and theory of the artist's studies.

And first, *Of Anatomy.* It would be unnecessary to cite what the greatest authorities have declared with respect to the requisiteness of this point of knowledge. It must be obvious that a man unacquainted with the construction and form of the several bones that govern and support the human frame, or who does not understand the way in which the muscles moving these bones are fixed to them, can make nothing of what appears of them through the integuments with which they are covered; which appearance, however, is one of the noblest objects of the pencil.

It seldom happens that the painter's business is limited to the mere exact copying of an object before him. For instance, if he has to depict gestures any way sudden, or motions any way violent, a living model would scarcely answer his purpose, since it holds but two or three instants, soon growing languid, and settling into a fixed attitude, which is produced by an instantaneous concourse of the animal spirits. Here then the painter's acquaintance with anatomy should come into play, his knowledge not only of the skeleton,

but of the origin, progress, and shape of the muscles which cover the bones, and also the different degrees in which nature has clothed these muscles with fat.

It was the intention of Michel Angiolo to give the public a complete treatise on this subject, and it is much to be regretted that he never should have accomplished so desirable a purpose. This sublime painter having observed (as appears in Condivi's life of him) that Albert Durer was deficient with respect to anatomy, resolved to compose a theory founded on his long practice: and surely no one could be better qualified to furnish anatomical precepts than he who, as competitor of Lionardo da Vinci, formed that famous cartoon of naked bodies which was studied by Raffaelle himself, and subsequently obtained the approbation of the Vatican.

The want of Michel Angiolo's precepts may be in some measure compensated by books written on the same subject by Moro, Cesio, and Tortelat; and more recently by Boucherdon, one of the most famous statuaries of France. Nothing, however, can be of equal service with the lessons of some able dissector, besides which a good deal of improvement may be acquired by the study of anatomical casts.

It was the particular happiness of the Greeks to be capable of characterizing and expressing the various parts of the human body much better than we can pretend to do; towards this end their earnest study of the naked figure mainly contributed, as did also the constant exercise taken by the Grecian youth in gymnastic games, which, by developement and display of the muscular system, afforded the painter and statuary far more perfect models than those at present employed.

It has been well suggested, that the student might make himself more thoroughly master of the science of anatomy by taking one part of any well known figure, the thighs of the Laocoon, for instance, and adding to them legs suitable to that state in which the muscles of the thighs are represented. To the simple contour of an anatome, or statue, he might add the parts included by it, and give it a system of muscles conformable to the quality of that particular contour. Exercises of this nature would soon establish him in the most fundamental principles of painting, especially if he had an opportunity of comparing his drawings with the statue or cast from which the parts given him to work upon were taken. See ANATOMY.

It cannot fail to appear obvious that the study of *Symmetry* should immediately succeed that of anatomy; since it would not much avail us to be acquainted with the different parts of the human body, and their several offices, were we, on the other hand, ignorant of the relative order and proportion of those parts to one another. The Greek sculptors were as eminent for the just symmetry of members as for anatomical skill. Polygnotus executed a statue which he denominated the *Rule*, from which other artists might take measures for every part of the human body. These measures, not to speak of those books which professedly treat of them, may now be derived from the Apollo Belvedere, the Laocoon, the Venus de Medici, and particularly the Antinous, which was the *rule* adopted by Nicholas Poussin. See SYMMETRY.

Perspective, according to Lionardo da Vinci (an authority from which there can be no appeal), is to be considered as the reins and rudder of painting. It teaches the proportion in which the parts fly from, and lessen on, the eye; how figures should be marshalled upon a plane surface, and foreshortened. It contains, in a word, the whole *rationale* of design.

As the demonstration of the rules of perspective depends on the doctrine of proportions, on the properties of similar triangles, and on the intersection of planes, it is desirable that an abridgment of Euclid should be put into the hands of the young painter, in order that he may understand these rules fundamentally, and not stand confined to a blind practice of them: at the same time, there is nothing in this author relative to the art of painting which might not easily be acquired in a few months. See PERSPECTIVE.

The study of *Optics*, so far as it is requisite to determine the proportion in which objects are to be illuminated or shaded, should proceed hand in hand with that of perspective: and this in order that the shades cast by figures upon the planes on which they stand may fall properly, and be neither too strong nor too light:—in a word, that those most beautiful effects of the *chiaro-scuro* may run no risk of ever deviating from truth, which, sooner or later, is sure to render itself visible. See OPTICS, CHIARO-SCURO.

"*Colouring*," says Sir Joshua Reynolds, "though it may at first sight appear a part of painting merely mechanical, yet it still has its rules, and those grounded upon that presiding principle which regulates both the great and the little in the study of a painter. By this, the first effect of

the picture is produced; and as this is performed, the spectator, as he walks the gallery, will stop, or pass along. To give a general air of grandeur at first view, all trifling, or artful play of little lights, or an attention to a variety of tints, is to be avoided; a quietness and simplicity must reign over the whole work; to which a breadth of uniform, and simple colour, will very much contribute. Grandeur of effect is produced by two different ways, which seem entirely opposed to each other. One is, by reducing the colours to little more than *chiaro-scuro*, which was often the practice of the Bolognian school; and the other, by making the colours very distinct and forcible, such as we see in those of Rome and Florence; but still, the presiding principle of both these manners is simplicity. Certainly, nothing can be more simple than monotony; and the distinct blue, red, and yellow colours which are seen in the draperies of the Roman and Florentine schools, though they have not that kind of harmony which is produced by a variety of broken and transparent colours, have that effect of grandeur which was intended. Perhaps these distinct colours strike the mind more forcibly, from there not being any great union between them; as martial music, which is intended to rouse the nobler passions, has its effect from the sudden and strongly marked transitions from one note to another, which that style of music requires; whilst in that which is intended to move the softer passions, the notes imperceptibly melt into one another."

Drapery, being also a most important branch of the art, accordingly requires the greatest study and attention. It but seldom occurs that a painter has only naked figures to represent; and it may be observed, that the flowing of the folds in every garment depends principally on the relief of the parts which lie under it. A certain author, whose name we do not recollect, remarks, that as the inequalities of a surface are discoverable by the inequalities in the water that runs over it, so the shape and posture of the members must be discernible by the folds of the vestment which covers them. See DRAPERY.

Of Landscape and Architecture. The most eminent landscape painters are Claude Lorraine, Poussin, and Titian. The former of these celebrated men, although he reigns triumphantly in every department of landscape, and in marine subjects also, yet might be said to have applied himself principally to express the various phenomena of light, particularly those observable in the heavens; and, thanks to the delicious climate of Italy, where he studied and practised, he has bequeathed us the brightest skies, and the most splendid cloud-tipped horizons that can be imagined.

Poussin was distinguished, and deserved to be so, for his uncommon application. His compositions are fraught with imagery of a classical as well as delightful character, being set off with learned episodes, such as poets reciting their verses in the woods, Grecian youths exercising gymnastic games, &c.

Titian may be styled the Homer of landscape painting. One of the finest landscapes that perhaps ever issued from mortal hands is the background of his *Martyrdom of St. Peter;* which has so much truth, so much variety, so much bloom, that it is almost impossible to behold without desiring to make an excursion thereinto.

Paolo Veronese is, in architecture, what Titian is in landscape. To excel in landscape, we must, above all things, study nature; to excel in architecture, we must regard principally the finest among the works of art: such, for instance, as the elevations of ancient edifices, together with the fabrics of those moderns who have best studied and best copied antiquity.

"*Invention* in painting does not," according to Sir Joshua Reynolds, "imply the invention of the subject; for that is commonly supplied by the poet or historian. With respect to the choice, no subject can be proper that is not generally interesting. It ought to be either some eminent instance of heroic action or heroic suffering. There must be something either in the action, or in the object, in which men are universally concerned, and which powerfully strikes upon the public sympathy.

"As it is required that the subject selected should be a general one, it is no less necessary that it should be kept unembarrassed with whatever may any way serve to divide the attention of the spectator. Whenever a story is related, every man forms a picture in his mind of the action and expression of the persons employed. The power of representing this mental picture on canvass is what we call invention in a painter. And as in the conception of this ideal picture, the mind does not enter into the minute peculiarities of the dress, furniture, or scene of action; so when the painter comes to represent it, he contrives those little necessary concomi-

tant circumstances in such a manner, that they shall strike the spectator no more than they did himself in his first conception of the story.

"The great end of the art is to strike the imagination. The painter therefore is to make no ostentation of the means by which this is done; the spectator is only to feel the result in his bosom. An inferior artist is unwilling that any part of his industry should be lost upon the spectator. He takes as much pains to discover, as the greater artist does to conceal, the marks of his subordinate assiduity. In works of the lower kind, every thing appears studied and encumbered; it is all boastful art, and open affectation. The ignorant often part from such pictures with wonder in their mouths, and indifference in their hearts.

"But it is not enough in invention that the artist should restrain and keep under all the inferior parts of his subject; he must sometimes deviate from vulgar and strict historical truth, in pursuing the grandeur of his design.

"How much the great style exacts from its professors to conceive and represent their subjects in a poetical manner, not confined to mere matter of fact, may be seen in the cartoons of Raffaelle. In all the pictures in which the painter has represented the apostles, he has drawn them with great nobleness; he has given them as much dignity as the human figure is capable of receiving; yet we are expressly told in scripture they had no such respectable appearance; and of St. Paul in particular, we are told by himself, that his *bodily* presence was *mean*. Alexander is said to have been of a low stature: a painter ought not so to represent him. Agesilaus was low, lame, and of a mean appearance: none of these defects ought to appear in a piece of which he is the hero. In conformity to custom, I call this part of the art, history painting; it ought to be called *poetical*, as in reality it is.

"As in invention, so likewise in *Expression*, care must be taken not to run into particularities. Those expressions alone should be given to the figures which their respective situations generally produce. Nor is this enough; each person should also have that expression which men of his rank generally exhibit. The joy, or the grief of a character of dignity is not to be expressed in the same manner as a similar passion in a vulgar face. Upon this principle, Bernini, perhaps, may be subject to censure. This sculptor, in many respects admirable, has given a very mean expression to his statue of David, who is represented as just going to throw the stone from the sling; and in order to give it the expression of energy, he has made him biting his under lip. This expression is far from being general, and still farther from being dignified. He might have seen it in an instance or two; and he mistook accident for generality."

These may be deemed the chief principles of the art of painting, which it behoves the student indispensably to acquire not only the knowledge but likewise the practice of. There are also others, which must not by any means be overlooked, and among these are to be enumerated—*Disposition* (see that word); *Costume* (which word see); and *Illusion*. This latter quality cannot, perhaps, in its strictest sense, be attained by painting: there is, however, a species of it (although probably the name is not fairly applied), which demands the greatest attention, and forms one of the chief fascinations of the art. It is this: that the painting shall resemble truth to such an extent, by the justness of its forms, the combination of its colours, and all its general effects, that the image thereby presented shall afford all the gratification resulting from the imitation of reality. This, it is admitted, is not illusion in the stricter sense of the word, for it exists as well in pictures on a small scale as in those of equal dimensions with the thing represented: but it is that exactness of imitation of which painting is susceptible, even in pictures which comprise any number of figures at a reasonable distance from each other.

We shall now proceed to illustrate the theoretical part of our subject by a few practical observations.

And, first:—Let us warn the young artist against being led astray by the ambition of composing facilely, or acquiring that which is termed a *masterly handling* of the chalk or pencil. To this mistaken aim, however, young men are incited in various ways. There is something dashing and fine about the notion in the first place; and in the next they are tempted to it by that slothful feeling too natural to us all. They are terrified at the prospect of the toil required to obtain exactness; not considering that the lives of all those painters who attained eminence furnish instances and recommendations of unceasing industry and application. When these great masters imagined a subject, they first executed a variety of sketches; afterwards a finished drawing of the whole; after

that, a more correct drawing of every separate part:—they then painted the picture, and concluded the whole by retouching it from the life.

At the same time, a student is not always *advancing* because he is *employed;* he must exert his strength in those parts of the art where the real difficulties lie; to those parts which distinguish it as a liberal art, and not to such as may be resolved into the merely ornamental.

It is, secondly, a matter of considerable importance, that those drawings on which the young artist first exercises his ability should be of the very best kind; that the profiles, the hands, the feet, &c. given him to copy be of the first masters, in order that both his eye and hand may become early acquainted with the most exquisite proportions and the most charming shapes.

Thirdly, It would be desirable that the student should copy some of the fine heads to be met with on Greek and Roman medals: he will hence become acquainted (if we may be allowed the phrase), with the personages whom he may in course of time transplant into his pictures, and, above all, improve himself in the important art of copying from relief. Hence also he will become initiated into the doctrine of light and shade, and the nature of that *chiaro-scuro* by which the different forms of things may, justly speaking, be said to be distinguished.

The chief divisions of the art of painting are into historical (comprising mystical and allegorical), grotesque, portrait, fancy, animals, fruits and flowers, battles, landscape, sea views, still life, and architecture.

Grotesque paintings are to be found in the celebrated Loggia of the Vatican palace at Rome, painted from the designs of Raffaelle, and on the cieling of the portico of the Capitol, carved from those of Michel Angiolo.

The other departments are sufficiently explained by their respective names: it may be as well, however, to observe, that the term *still life* refers to all inanimate objects, and chiefly to household furniture, instruments of use, &c.

Modes and Materials of Painting. The different methods of painting at present practised are:—

Oil painting, which is preferable to any other mode, since it allows a complete gradation of tints, in the most enduring of all materials, except those of musaic. See Musaic.

Fresco, is performed, as the reader will see by referring to that word, with colours diluted in water, and laid on a wall newly plastered, with which they incorporate, becoming often as durable as the stucco itself.

Crayons, in which colours, either simple or compound, are ground in water mixed with gum, and made into small rolls of a hard paste, which are then used on paper or parchment. See Crayon.

Miniature, consisting of colours prepared with water or gum, and laid on vellum or ivory. A smaller kind of portrait.

Enamel, performed on copper or gold, with mineral colours dried by fire. This method is likewise extremely durable. See Enamel.

Encaustic, executed by the mixture of wax with the varnish and colours. See Encaustic.

Water colours, more properly denominated *limning*. This is performed with colours mixed with water, gum, size, or paste, on silk, paper, and sundry other materials.

Besides these various methods we may add the painting in *distemper;* namely, with colours mixed with size, white of eggs, or any thin glutinous substance, and used on paper, linen, silk, board, or wall. See Distemper. There are also painting on *glass* (which word see), and *clydonic* painting, consisting of a mixed use of oil colours and water.

The various pigments at present in use and fitted for the general purposes of oil painting are:—Cremnitz white, white lead of different sorts, a fine yellow, recently discovered from chromete of iron, king's yellow or orpiment, patent yellow, Naples yellow, ochres, Dutch pink, terra di Sienna, yellow lake, red lead, vermilion, red ochre, Indian red, Venetian red, lakes of various kinds, brown pink, Vandyke's brown, umber, burnt and unburnt, terra di Sienna, burnt, Prussian and Antwerp blue, ultramarine, ivory black, blue black, asphaltum. These may be reckoned the chief colours for the palette: there are, however, several others, which are employed for particular purposes, such as verdigris, &c.

The oils best adapted to the ends of painting are poppy, nut, and linseed oils; and in this climate a preparation of the latter, by boiling it with some siccative, is in common use. See Oil.

We will subjoin two or three observations made by a quaint old writer on art (Richardson), with respect to the method of distinguishing a genuine picture of one of the old masters from a copy:

"There are some pictures and drawings

which are seen to be originals, though the hand and manner of thinking are neither of them known; and that by the spirit and freedom of them: which sometimes appears to such a degree as to assure us it is impossible they should be copies. But we cannot say, on the contrary, when we see a tame, heavy handling, that it is not original merely upon that account, because there have been many bad originals, and some good masters have fallen into a feebleness of hand, especially in their old age.

"The best counterfeiter of hands can rarely do it so well as to deceive a good connoisseur; the handling, the colouring, the drawing the airs of heads, some, nay, all of these discover the author; more or less easily, however, as the manner of the master happens to be: what is highly finished (for example) is more easily imitated than what is loose and free.

"Copies made by a master after his own work are discoverable by being well acquainted with what that master did when he followed nature; these shall have a spirit, a freedom, a naturalness which even he cannot put into what he copies from his own work.

"To conclude:—There is one qualification absolutely necessary to him that would know hands, and distinguish copies from originals; as it also is to any one who would judge well of the goodness of a picture or drawing; or indeed of any thing else whatsoever; and that is—he must know how, and accustom himself, to take in, retain, and manage, clear and distinct ideas." See ORIGINAL.

In the work of JUNIUS, De Pictura Veterum, book 2, chap. iii. sect. 3, and in the Bibliotheca Greca of FABRICIUS, book 3, chap. xxiv. sect. 10, are catalogues of Greek authors who have written upon painting; of which, however, few have reached our times. Among this number are the *Icones* of the two PHILOSTRATES; which have been translated into French under the title of Les Tableaux de Plate Peinture, &c. by BLAISE DE VIGENERE, corrected and augmented by TH. EMBRY, Paris, 1615, 1617, in fol. An excellent commentary upon this work may be found in a Memoir of Count CAYLUS, inserted in the twenty-ninth volume of Mémoires de l'Académie des Belles Lettres. To some editions of the works of Philostrates are added a work of CALLISTRATES, entitled Ἐκφράσεις (that is, explanations or descriptions).

The ancient work which gives the most detailed accounts of the art of painting among the ancients, is the Natural History of PLINY, who, in speaking of minerals, takes occasion to speak of colours, and their use in painting; in which subject he treats of the history of ancient painting, in several chapters of the thirty-fifth book. These chapters have been published separately, and commented upon by DURAND, in a work entitled Histoire de la Peinture ancienne, published at London in 1725, in fol. M. FALCONET has also published a translation of the 34th, 35th, and 36th books of PLINY, with notes, Amsterd. 1772, 8vo. These chapters of Pliny have also been commented upon, in several articles inserted in the Memoirs of the Academy of Inscriptions and Belles Lettres. (An English translation of the whole work, by P. HOLLAND, was published in 2 vols. fol. Lond. 1634.)

Count CAYLUS has given, in the nineteenth volume of the same work Eclaircissemens sur quelques Passages de Pline qui concernent les Arts dependans du Dessin; and in the twenty-fifth volume, three Memoirs, entitled Réflexions sur quelques Chapitres du trente-cinquième Livre de Pline. In the second of these memoirs the reflections of the author are particularly directed to the kind and manner of ancient paintings; and in the third, the character and manner of the Greek painters. The twenty-fifth volume contains also a Memoir of M. DE LA NAUZE, upon the manner in which Pliny has treated the art of painting. M. QUATREMERE DE QUINCY, the learned author of part of the Encyclopédie Méthodique, and of Letters from London, in 1818, to Canova, on the Elgin Marbles, announced in 1805, a new translation of this book; but we are not certain that he published it.

Among modern works upon painting, we will first mention those which are written in Latin: among the principal of which are:—L. Bapt. ALBERTI, de Pictura, libri iii. Basil, 1540, in 8vo. Among the best translations of this work are, one in Italian, published at Venice, 1547, 8vo.; one in French by Jean MARTIN, among the works of ALBERTI upon Architecture, Paris, 1553, fol.; and one in English in the edition of his work upon Architecture, by LEONI, 1726 and 1739, 3 vols. fol. Also, Joh. MOLANI, de Picturis et Imaginibus Sacris, libri ii. Leovard. 1570 and 1594, 8vo. Robert FLUDD, or DE FLUCTIBUS, Tractatus de Arte Picturæ, Francof. 1624, fol. Jul. Cæs. BULENGER, de Pictura, Plastice, et Statuaria Veterum, printed in his Opuscula, Ludg. Batav. 1621, 8vo.; and also separately under the same title,

in 8vo. 1627, as well as in the ninth volume of Trésor de GRONOVIUS. Of this work Thomas MALIE has given an English translation, London, 1657, fol. It is merely a nomenclature of the various articles used in painting, and of the manner in which they are prepared. The next in chronological order is the work of Franciscus JUNIUS (Francis DUJONG, or YOUNG), entitled de Pictura Veterum, Amst. 1637, in 4to. A new edition of it, much augment and corrected, was published by GRÆVIUS at Rotterdam, in 1694, fol. which is reckoned preferable to the first. At the end of the work is a list of ancient artists, in alphabetical order, which is, perhaps, one of the best parts of the work.

Among the Latin works which treat of the theory and practice of the art, we find:—Speculum Imaginum Veritatis occultæ per Symbola et Emblemata, Auct. Jac. MOSENIO, Col. 1661, 1681, 8vo. De Graphice sive Arte pingendi; which is the fifth chapter of the work of Ger. J. VOSSIUS, entitled de Natura Artium. Joannes SCHEFFERI, Argentinensis, Graphice, id est de Arte pingendi, Norimb. 1669; Upsal. 1699, 8vo. This is an interesting little work, and is well written. De Inanibus Picturis, Diss. Joa. Fr. JUNGERI, Lips. 1679, in 4to. By "picturæ inanes" the author appears to mean those paintings which represent imaginary beings, or scandalous subjects. Dissert. de Pictura, Auct. Hulderic. Sigism. ROTHMALER, Jen. 1692, 4to. De Lectione Poetarum recentiorum Pictoribus commendanda, Programma, Joh. G. JACOBI; Hal. 1766, 4to. De Pictura contumeliosa, Diss. Joh. Lud. KLUBER, Erl. 1787, in 4to. Car. HODOBY DE HODA, Ars delineandi Coloribusque localibus adumbrandi, 1790, 8vo. Car. Adol. DU FRESNOY de Arte graphica, Paris, 1658.—A poem on the art, with the French version by De Piles, of which Dryden published a prose translation in 1694; Wills, an English painter, a metrical translation without rhymes; and again Mason, in 1782, a translation, with notes by Sir Joshua Reynolds.

Among the works written in Italian are, Discorso eruditissimo della Pittura, con molte segrete Allegorie, circa le muse, published in the Institutione al comporre in ogni Sorte di Rima, &c. of Mar. EQUICOLA, Milan, 1541, 4to. Dialogo de Pittura, di Paolo Pino, Ven. 1548, 4to. Trattatello della nobilissima Pittura, e della sua Arte, della Dottrina, e del Modo per conseguirla agevolmente, da Mich. Ang. BIONDI, Ven. 1549, 8vo.:—a little and very superficial work. Il Disegno del Anton. Franc. DONI, dove si tratta della Scoltura, Pittura, de' Colori, de' Getti, de' Modegli, con molte cose appertinenti a quest' Arti, Venegia, 1549, 8vo.:—a useful little work stored with excellent directions. Della nobilissima Pittura, e della sua Arte, del modo e della Dottrina di conseguirla agevolmente e Presto, da BIONDO, Venice, 1549, 8vo. Introduzzione alle tre Arti del Disegno, thirty-five chapters (for an account of which see Vite de' Pittori da VASARI. L'Aretino, Dialogo della Pittura, di Lod. DOLCE, nel quale si raginao della Dignità di essa Pittura, e di tutte le Parte necessarie che a perfetto Pittore si acconvengano: con Esempi di Pittori ant. e Mod. e nel Fine si fa menzione delle Virtù e delle Opere del divin TIZIANO, Venice, 1557; of which there is a more modern edition, with a French translation (printed at Rome, 8vo.), and a long preface by the translator; also an English translation published in London, 1782, 12mo. Osservazioni nella Pittura, di M. Cristoïane SORTE, Venice, 1580, 4to. Lettera di Bartolomeo AMMANATI, sopra le Pitture men che oneste, Firenze, 1582, 4to. Il Riposo di Raffaelo Borghini, in cui si favella della Pittura e delle Scoltura, et de' più illustri Pittori e Scultori, antichi e moderni, Firenze, 1584, in 8vo.; of which there has been a new edition, augmented and corrected by Antonio Maria BISCIONI, Firenze, 1730, 4to.; and a much later one in 3 vols. 8vo. Parere sopra la Pittura, di M. Bernard CAMPI, Pittore Cremonese, Cremona, 1584, 4to. Discorso d'Allessandro LAMO, intorno alla Scoltura et Pittura, Cremona, 1584, 4to. Trattato dell' Arte della Pittura, ne' quali si contiene tutta la Teorica e la Prattica di essa Pittura, da Giovanni Paolo LOMAZZO, Mil. Pittori, div. in vii. libri, Milano, 1584, 4to. The same work is also to be found under the following title, Trattato dell' Arte della Pittura, Scoltura, et Architettura, da G. P. LOMAZZO, Mil. Pitt. div. in vii. libri, ne' quali si discorre della Proporzione, de' Moti, de' Colori, de' Lumi, della Prospettiva, della Prattica, della Pittura, e finalmente de le Istorie d'essa Pittura, con una Tavola de' Nomi de tutti le Pittori, Scultori, Architetti, e Matematici, antichi e moderni, Milan, 1585 and 1590, in 4to. There is an English translation of this work by HAYDOK, London, 1598, fol.; and a French translation of the first book, which appeared at Toulouse in 1649, in fol. To this work we must add another by the same author, entitled, Idea del Tempio della Pittura nella quale si discorre dell' Origine e del Fondamento delle cose con-

tenente del trattato, dell' Arte della Pittura, Milan, 1571, in 4to. De' veri Precetti della Pittura de Giovanni Bat. Armenini da Faenza, lib. iii. ne' quali con bell' Ordine d' utili e buoni Avvertimenti per chi desidera in essa Farsi con prestezza eccellente si dimostrano i Modi principali del disegnare e del dipingere, di fare le Pitture che si convengono alle Condizioni de' Luoghi e delle Persone, Ravenna, 1587, in 4to., and Venice, 1678, in 4to. Il Filogino, Ovvero del Fine della Pittura; Dialogo del P. D. Gregorio Commanino, Canon. Later. nel quale s mostra qual sia l'imitare più perfetto, o il Pittore, o il Poeta, Mantova, 1591, 4to. Difinizione e Divizione della Pittura, di Giovan. Batt. Paggi, Nobile Genov. e Pittore, Geneva, 1607, fol. L'Idea de Pittori, de' Scultori, e degli Architetti, del Cav. Feder. Zucchieri, in due libri, Torino, 1607, 4to. This work is to be seen also in the sixth volume of the Raccolta di Lettere sulla Pittura, Scultura, e Architettura, Rome, 1754, 7 vols. 4to. Avvertimenti e Regole sopra l'Architettura civile e militare, la Pittura, Scultura, e Prospettiva, da Pier' Antonio Barca, Milan, 1620, fol. Trattato della Pittura, fatto a commune Beneficio de' Virtuosi, da Fra. Dom. Francesco Bisagno, Cavaliere di Malta, Ven. 1642, 8vo. La prima Parte della Luce del dipingere, di Crisp. del. Passo, Amsterd. 1643, fol. Trattato della Pittura, de Lionardo da Vinci, dato in Luce con la Vita dell' istesso Autore, scritta da Raff. Du Fresne, Paris, 1651, and Naples, 1733, fol., with engravings, after designs made by Poussin. There was a new edition of it published at Florence, 1792, 4to., augmented with the life of the author by Franc. Fontani. There is also a translation of it into French by Rol. Freart. de Chambray, 1651, fol. 1716, 1724, &c., and an English translation, London, 1721, 8vo. Trattato della Pittura e Scultura, uso ed abuso loro, composto da un Teologo (Pere Ottonelli), e da un Pittore (Pietro di Cortona), in cui si risolvono molti Casi di Coscienza intorno al fare e tenere, le Immagine sacre e profane; si riferiscono molte Historie antiche e moderne, si considerano alcune Cose d' alcuni Pittori morti e famosi del nostro Tempo, e si notano certi avvisi e certi particolarità circa l'operare secondo l'Osservazioni fatte in alcune Opere, di Valent. Luomi, Firenza, 1652, 4to. Il Microcosmo della Pittura, di Franc. Scanelli da Forli; Cesena, 1657, 4to. Carta del Navigar pittoresco, dial. in quarta Rima, in Dialetto Venez. da Marco Boschini, Venezia, 1660, 8vo. Le Minere della Pittura, di M. Boschini, Venice, 1664, 4to. In the Prodromo alle Arte maestra, di Franc. Lana, Brescia, 1670, fol. the author treats of invention, of design, of colours, and of the different kinds of painting. Riflessioni sopra la Pittura di Nicolas Poussin, printed in the Vite de' Pittori, de' Scultori, ed Architetti moderni, par Bellori, Rome, 1672, 4to. Il Vacabolario Toscano dell' Arte del Disegno, co' propri Termini e Voci non sola della Pittura, Scultura, e d'Architettura, ma Ancora di altre Arti, e che hanno per Fondamento il Disegno, di Fil. Baldinucci, Firenza, 1681, 4to., of which Ant. Mar. Biscioni has given a new edition, published at Florence, 1730, 4to. Baldinucci is also the author of Lettera nella quale si risponde ad alcuni quesiti in Materie di Pittura e Scultura, Rome, 1681, 4to.; and of La Veglia, Dialogo di Sincero Vero (Philip Baldinucci), in cui si disputano, e scogliono varie Difficultà pittoriche, Lucca, 1684, 8vo., and in the Raccolta di alcuni Opuscoli, da Fil. Baldinucci, Fir. 1765, 4to. Bellori, della Pittura antica, Venez. 1697. Le Pittura in Parnasso, da Giovanni Maria Ciocchi, Pittore, Firenza, 1725, 4to. La Teorica della Pittura, ovvero Trattato delle Materie più necessarie per apprendere con Fondamento quest' Arte, composto da Ant. Franchi, pittore Lucchese, Lucca, 1739, 8vo. Sfogamenti d'ingegno sopra la Pittura e la Scultura, da P. Franc. Minozzi, Venice, 1739, 12mo. Dialoghi sopra le Arti del Disegno, by Bottari, Lucca, 1754, 8vo. Avvertimenti di Giamp. Cavezzoni Zanotti, per lo incaminamento di un Giovane alla Pittura, Bal. 1756, 8vo. Dissertazione sopra l'Arte della Pittura dell' Abbate Giovanni Andrea Lazzarini, in the 97th and following pages of the second volume of the Nuova Raccolta d'Opusculi scientif. et filol. reprinted at Pesaro, 1763, 4to.; and in the Catalogo delle Pitture nelle chiese di Pesaro, Pes. 1783, 8vo. Saggio sopra la Pittura, by Count Algarotti, Livorno, 1763, 8vo.; of which there is a French translation by Pingeron, Paris, 1769, 12mo., and an English translation, 12mo. London, 1783. L'Idea del profetto Pittore del servire di Regola nel Guidizio, che si deve formare Intorno all' Opere de' Pittori, accresciuta della Maniera di dipingere sopra le Porcellane, Smalto, Vetro, Metalli, e Pietre, Venice, 1771, 4to. Dell' Arte di vedere nelle belli Arti del Disegno, secondo li Principi di Sulzer e di Mengs, Venice, 1781, 8vo. The works of Mengs, in their various editions and translations. A poem, entitled dell Arte

Pittorica, in eight cantos, by Count Ad. CHIUSOLE, Venice, 1768, 8vo. will afford some pleasure; it has been abridged into four cantos, under the title of Precetti della Pittura, Vic. 1781, 8vo. Storia della Pittura in Italia da Luigi LANZI. The best edition of which is in six volumes 8vo., Bassano, 1809. Vicenzo Requeno, saggi sul Ristabilimento dell' antica Arte de' Greci e Romani Pittori, Rome, 1786. A second edition of which appeared in 2 vols. Parm. 1787. Storia della Pittura e della Scultura dai Tempi antichi. This work, which is written in Italian and English, has also the following title, The History of Painting and Sculpture, by Thomas HICKAY, and was published at Calcutta in 1788, 4to.

Among the works written in Spanish upon the theory of painting are the following, namely:—Arte dei Pintura, symmetria y perspectiva, por Phil. NUNNEZ, in Lisbon, 1615, 4to. Memorial informatorio, por los Pintores, Madrid, 1629, 4to. Dial. de la Pintura, su Defensa, Origen, Essencia, Definicion, Modos, y Differencias, por Vinc. CARDUCHO, Firent. Madrid, 1633 and 1637, 4to. Trattato de la Pintura, su antiguedad y grandezas, por Franc. PACHECO, Seville, 1649, in 4to. El Museo pintorico, y escala Optica, por Ant. Palamino VELASCO, Madrid, 1715, 1724, 3 vols. fol. Under the title of La Pittura, Diego Ant. REGON DE SILVA has printed, in 1788, at Segovia, a poem in three cantos, of which painting is the subject.

Among the works of French authors on this subject are the following:—Ideé de la Perfection de la Peinture démontrée par les Principes de l'Art et par des Exemples conformes aux Observations que Pline et Quintellien ont faits sur les plus célèbres Tableaux des anciens Peintres, mis en Parallèle avec quelques Ouvrages de nos meilleurs Peintres modernes, Lion. da Vinci, Raffaelle, Jules Romain, et Le Poussin, par ROLAND FREART, Sieur de Chambray, au Mans, 1662, 4to.; Paris, 1672, 8vo. Le Peintre converti aux Règles précises et universelles de son Art, avec un Raisonnement au Sujet des Tableaux, by Abr. BOSSE, Paris, 1667, 4to. Des Principes de l'Architecture, de la Peinture, Sculpture, et des autres Arts qui en dépendent, avec un Dictionnaire propre à chacun de ces Arts, par André FELIBIEN, Paris, 1669, 1697, 4to. Conférences de l'Académie royale de Peinture et de Sculpture pendant l'Année 1667, Paris, 1669, 4to.; Amst. 1706, in 12mo.; and in the fifth volume of Entretiens sur les Vies des Peintres, by the same, Trev. 1725, in 12mo. Traité de la Pratique de la Peinture, par Philippe de la HIRE, in l'Histoire de l'Académie des Sciences de Paris, 1666—1669, vol. 9, page 635, and following. L'Académie de la Peinture, nouvellement mise au jour pour instruire la Jeunesse à bien peindre en Huile et en Miniature, par LA FONTAINE, Paris, 1679, 12mo. Conférence de l'Académie, avec les Sentimens des plus habiles Peintres sur la Pratique de la Peinture et de la Sculpture, avec plusieurs Discours académiques, par Henry TESTELIN, Paris, 1696, fol. Livre de Secrets pour faire la Peinture, 1682, 12mo. Cours de Peinture par Principes, by M. Roger de PILES, Paris, 1708, 1720, 12mo. This work forms the second volume of his Œuvres diverses, Amsterdam, 1766, 12mo. Elémens de la Peinture-pratique, by the same, Paris, 1684, 12mo; 1708, 12mo. Ch. Ant. JOMBERT has given an enlarged edition of it, 1766, 8vo., which forms the third volume of his Œuvres diverses, Amster. 1766, 12mo. Many authors, among others M. de MURR, in his Bibliothèque de Peinture, at page 151, have attributed this work to Jean Baptiste CORNEILLE, who is not the author of the engravings which are in it. Traité sur la Peinture, pour en apprendre la Théorie et se perfectionner dans la Pratique, par Barnard DUPUI DU GREZ, Toulouse, 1699, 4to. Réflexions sur la Poésie et sur la Peinture, by the Abbé Jean Baptiste DUBOS, Paris, 1719, 2 vols. 12mo. There have appeared enlarged editions of it in 1733, and 1740, in 3 vols. 12mo. Discours prononcés dans les Conférences de l'Académie royale de Peinture et de Sculpture, by Antoine COYPEL, Paris, 1721, 4to. Dialogues sur la Peinture, by FENELON. They are joined to the Life of Mignard, by the Abbot MONVILLE, Amst. 1731, in 12mo. In the Choix des Mercures, vol. ii. page 167, is a Letter upon Painting, by M. BROSSARD de Mantenei. Observations sur la Peinture, London, 1736, 8vo. Réflexions sur la Peinture, by M. de la FONT DE SAINT YENNE, 1746, 12mo. Lettres sur la Peinture, à un Amateur, par Louis Guillaume Baillet de SAINT JULIEN, Genève, 1750, 12mo. Essai sur la Peinture, Sculpture, et Architecture, by Louis de BACHAUMONT, Paris, 1752, 8vo. Jaq. GAUTIER, Observations sur l'Hist. naturelle, sur la Physique, et sur la Peinture, Paris, 1752, 6 vols. Observations sur la Peinture et sur les Tableaux anciens et modernes, by the same, Paris, 1753, 2 vols. 12mo. In the Recueil de quelques Piéces concernant les Arts, by COCHIN, Paris, 1757, 12mo. page 121, is a Mémoire sur la

Peinture, which had already appeared in the Mercure de France. Discours sur la Peinture et sur l'Architecture, by M. du PERRON, Paris, 1758, 8vo. Réflexions sur les différentes Parties de la Peinture, is found with l'Art de Peindre of WATELET, Paris, 1760, 4to. 1761, 12mo. In l'Amateur; ou, Nouvelles Pièces et Dissertations pour servir aux Progrès du Goût et des Beaux Arts, Paris, 1762, 8vo. are some reflections upon colours. Traité de la Peinture, suivi d'un Essai sur la Sculpture, pour servir d'Introduction à une Histoire universelle relative à ces beaux Arts, by André BARDON, Paris, 1765, 2 vols. in 12mo. Observations raisonneés sur l'Art de la Peinture, appliqueés à la Galérie de Dusseldorf, by Fredon de la BRETONNIERE, Dusseldorf, 1776, 8vo. Principes abrégés de Peinture, par M. DUTEMS, Tours, 1779, 8vo. Traité des Principes et des Règles de la Peinture, by M. LIOTARD, Genève, 1781, 8vo. Réflexions sur la Peinture et la Gravure, by C. F. JOULLAIN, 1785, 12mo. The author of this work speaks particularly of the dealing in pictures. There are also several memoirs upon this matter in the Bibliotheq. des Artistes et des Amateurs, by the Abbé Jean RAYMOND DE PETITY, 1766, 3 vols. 4to.

Many French didactic poems have been written on painting; such are:—La Peinture, a poem, 1755, 12mo. L'Art de peindre, by WATELET, Paris, 1760, 4to., Amst. 1761, 12mo. La Peinture, a poem, crowned at the floral games in 1767, by M. Mich. d'AVIGNON, Lyons, 12mo. La Peinture, a poem, in three cantos, by LA MIERRE, Paris, 1770, 4to.; Amst. 1770, 12mo. There are also to be found some interesting articles in the Grand Livre des Peintres ou l'Art de la Peinture, considéré dans toutes ses Parties et démontré par Principes, avec des Réflexions sur les Ouvrages de quelques bons Maitres et sur les Défauts qui s'y trouvent, par Gerard de LAIRESSE, Paris, 1787, 2 vols. 8vo.

Among the older works in the English language upon this subject are:—A proper Treatise, wherein is briefly set forth the Art of Limning, London, 1625, 4to. Ars Pictoria; or, an Academy treating of Drawing, Painting, Limning, and Etching: to which are added thirty copper-plates, expressing the choicest, neatest, and most exact grounds and rules of symmetry, collected out of the most eminent Italian, German, and Netherland authors, by ALEX. BROWN, Lond. 1660, 8vo.; 1669 and 1675, small folio. Introduction to the general Art of Drawing and Limning, Lond. 1674, 4to. Painting illustrated, in three Dialogues, containing some choice Observations upon the Art; together with the Lives of the most eminent Painters from Cimabue to the time of Raffaelle and Michel Angiolo, with an explication of the difficult terms, Lond. 1685, 4to., 1719, 4to. 1785, 4to. by Will. AGLIONBY, and the lives of painters are corrected after VASARI. Polygraphice; or, the Art of Drawing, Engraving, Etching, Limning, Painting, Washing, by SALMON, Lond. 1678, 2 vols. 8vo.; 1701, 2 vols. 8vo. The Art of Painting of the best Italian, French, and German Masters, Lond. 1692, fol. Art of Painting in Oil, and Method of Colouring, by J. SMITH, London, 1753, 12mo. Art of Painting after the Italian Manner, by M. ELSUM, London, 1704, 8vo. Essay upon the Theory of Painting, by RICHARDSON, London, 1719, 8vo. This work forms the first volume of a Treatise on Painting of the same author, which has been translated into French by A. RUTGERS; Amst. 1728, 8vo. 4 parts in 3 vols. The Art of Drawing and Painting in Water Colours, by J. SMITH, London, 1730, 1732, 1757, and 1779, in 12mo. Essay upon Poetry and Painting, with relation to the sacred and profane History, by Charles La MOTTE, London, 1730, 12mo. The Principles of Painting, London, 1744, 8vo. Polymetis; or, an Inquiry concerning the Agreement between the Works of the Roman Poets and the Remains of the ancient Artists, by John SPENCE, London, 1747, 1755, and 1774, fol. TINDAL has given an abridgment of it, London, 1765, republished in 1786, 8vo. Plan of an Academy of Painting, Sculpture, &c. London, 1755, 4to. Practice of Painting and Perspective, in which is contained the Art of Painting in Oil, with the Method of Colouring; first Painting or Dead Colouring, second Painting, third or last Painting, painting Backgrounds, Copying, Drapery, and Landscape Painting, by Th. BARDWELL, London, 1756, 1773, and 1782, 4to. Inquiry into the Beauties of Painting, and into the Merit of the most celebrated Painters, ancient and modern, by Dan. WEBB, London, 1777, 4to. A Letter on Poetry, Painting, and Sculpture, by KING, London, 1768, 12mo. Seven Discourses delivered in the Royal Academy by the President Sir Joshua REYNOLDS, London, 1778, 8vo. There was a French translation of it published in Paris in 1787, 2 vols. 12mo. Several other Discourses of Reynolds have since been published, and are now collected in his works, London, 4to. 1796, &c. Sketches on the Art of Paint-

ing, by Talbot DILLON, 1782, 8vo. The Artist's Repository and Drawing Magazine, exhibiting the Principles of the polite Arts in their various Branches, London, 1784, in 4to. There are to be found also some curious details upon painting in the Handmaid to the Arts, by M. DOSSIE, London, 1764, 2 vols. 8vo. as in the School of Arts, London, 1785, 8vo.

Among the English poems upon painting are:—A Poetical Epistle to an eminent Painter, 1778, 4to. by W. HAYLEY, Esq. and the Beauties of Painting, by Pollinger ROBINSON, 1783, 4to.

More modern works by Opie, Fuseli, West, and others, are so well known, that they are omitted to make room for the enumeration of others less common.

In the Dutch language are:—Inleyding tot de hooghe School der Schilderkonst door Sam. Van. HOOGSTRAETEN, Middelb. 1641, 4to.; Rotterd. 1678, 4to. WILLH GÆRE, Natuurlyk en schilderkonstig Ontwerp der Menschenkunde: leerende niet alleen de Kennis van de Gestalte, Proportie, Schoonheyd, Muskelen, Bewegingen, Actien, Passien en Welstand des menschenbeelden, tot de Teykenkunde, Schilderkunde, Beldhouwery, Botseer en Giet-Oeffening toe passen; maar ook hoe sich een mensch na deselve Regelen, in allerhand Doeningh van Gaan, Staan, Loopen, Torssen, Dragen, Arbeyden, Spreken en Andere gebeerden bevallig en verstandelijk aanstelen zal, Amst. 1682. An excellent work, with many fine engravings. Der leermeester der schilderkonst, eertyds in rym gestelt door Karel van Mender, weder aan't licht gegeeven en ontrymi'd door WIBRANDUS DE GEEST, Schilder, Leawarden, 1712, 8vo.

Among works upon painting written in German, whose titles we have been able to collect, we shall mention—Le Livre curieux des Arts à l'Usage des Peintres, Sculpteurs, et Orfèvres, par Henri VOGTHEREN, Strasburg, 1543, 4to. Le Manuel des Arts de Sébald BEHAM, propre à apprendre à peindre et à dessiner d'après les véritables Proportions et Divisions du Cercle à l'Usage des Peintres et des Artistes, Francfort, 1605, 4to., with fifty-seven engravings in wood. L'Academia tedesca della Architettura, Scultura, e Pittura, Nurembourg, 1675, 1679, 2 vols. fol. Le vrai Chemin à suivre pour apprendre à peindre, par Guillaume STETTLER, Berne, 1679, 12mo. Le Peintre curieux, Dresden, 1679, 8vo., with engravings. Le Peintre instruit, habile, galant, et édifiant, par J. DAUW, Copenhagen, 1721, 8vo.; an enlarged octavo edition by Charles BERTRAND, ib. 1755, 8vo. Principes de la Peinture et du Dessin, par Joseph WIDTMAISSER, Vienna, 1731, 4to. Le Peintre instituteur, montrant aux Amateurs comment il faut s'y prendre pour apprendre à peindre en Huile, en Pastel, en Fresque, &c. by Jean Melchior CROECKER, Jena, 1778, 8vo. Idées sur l'Imitation des Monumens Grecs en Peinture et Sculpture, Dresden, 1754 and 1756. Epître au Sujet de l'Ouvrage précédent, Dresden, 1755, 4to. Dissertations upon the work: Idées sur l'Imitation des Monumens Grecs, ib. 1756, 4to., Jean WINCKELMANN. La Manière d'apprendre à peindre: Ouvrage dans lequel on montre l'Excellence et l'Utilité de cet Art, l'Usage qu'on doit en faire, et comment on doit s'y perfectionner, &c. Leipsick, 1756, 8vo. Réflexions sur la Peinture, by Chrétien Louis de HAGEDORN, Leipsick, 1762, 2 vols. 8vo. This work has been translated by Huber, Leipsick, 1775, 8vo. Du Laocoon; ou, des Limites respectives de la Poésie et de la Peinture, by G. E. LESSING, Berlin, 1766. M. Charles VANDERBOURG has given a French translation of it, Paris, Renouard, 1802, 8vo. Dissertations sur la Théorie de la Peinture et du Dessin, où on établit les vrais Principes propres pour former le Goût dans les Arts, Francfort et Leipsick, 1769, in 8vo. Sur la Nature et l'Art dans les Tableaux, la Sculpture, l'Architecture, et la Gravure, Leipsick, 1770, 2 vols. 8vo. par Christophe SCHEYB. The same author has also published another work upon this subject: it is entitled Orestrio, sur les Arts du Dessin, avec un Appendix sur la Maniére de faire des Empreintes en Souffre, Plâtre, et Verre, et graver en Pierres dures, &c. Vienna, 1764, 2 vols. 8vo. Instruction sur l'Etude de la Peinture en tant qu'elle appartient aux beaux Arts, et la Peinture comme métier, prouvée d'une Manière pratique, par E. L. D. HUCH, Halle, 1773, 8vo. L'Etude du Dessin et de la Peinture, à l'Usage des Commençans, suivi d'une Liste des plus célèbres Peintres, Sculpteurs, et Architectes, ainsi que des Académies et Ecoles, par Chrétien Louis REINHOLD, Goetingue, 1773, 8vo., with forty-five engravings. Système des Arts du Dessin, suivi d'une Introduction à l'Etude des Antiques, Hiéroglyphes, et Attributs allégoriques modernes, by the same, Munster, 1784, 8vo., with forty engravings. We may regard, as a continuation and supplement of this work, L'Ecole du Dessin et de la Peinture, Munster, 1786, 8vo., with forty-five engravings: and l'Académie des beaux Arts, &c., with fourteen engravings,

Munster, 1788, 8vo., both by the same author. Principes de la Peinture, par JUNKER, Zurich, 1775, 8vo. Académie des Arts du Dessin, par Chrétien Frédéric PRANGEN, Halle, 1778, 2 vols. 8vo. Leçons sur les Arts du Dessin, destinés aux Elèves des Académies des Arts, par H. A. MERTENS, Leipsick, 1783, 8vo. Instruction sur la Théorie et la Pratique du Dessin et de la Peinture, pour les Commençans de cet Art, Altona, 1778, in 8vo., with engravings. Bibliothèque des Arts, destinée aux Peintres, Dessinateurs, Graveurs, et Sculpteurs, en Forme de Lettres, par C. LANG, Erlangen, 1779. The same author has given a continuation of this work under the title of Lettres à l'Usage des Peintres, Dessinateurs, &c., Francf. 1791 et 1792, 2 vols. 8vo. Magasin pour les Arts du Dessin, Munich, 1791, 8vo. Théorie de la Peinture; ou, l'Instruction sur la Peinture d'Histoire à l'Usage des Commençans, par Christophe FESEL, Wurtzbourg, 1792, 8vo.

Among the best Latin works which treat on various subjects connected with the art of painting, or in praise of the arts in general, may be enumerated, Martin FRISIUS, de Erroribus Pictorum, Hafniæ, 1703, 4to. MULLER, de Pictura, Dissertatio juridica, Jen. 1712, 4to. BRUNQUELL, de Pictura honesta ac utili, Jen. 1733, 4to. C. F. VOITA BERG, de Pictura famosa, Jen. 1703, 4to. FICHTNER, de eo quod justum est circa Picturam, Altorf, 4to. THEOPH. BOERNER super Privilegiis Pictorum, Lipsiæ, 1751, 4to. DURR Franc. Ant. de Probatione per Picturas in sacris, Moguntiæ, 1779, 4to. KLUBER Joannes Ludov. de Pictura contumeliosa, Erlangen, 1787, 4to.

The best Italian works on the same subjects are:—Trattato della Nobiltà della Pittura, composto ad instanza della Venerab. Comp. di S. Luca, et della Nob. Acad. de' Pittori di Roma, da Rom. ALBERTI, Roma, 1585, 4to. Another edition of the same work was published at Pavia in 1604, also in 4to. The second of the Lezioni di M. Ben. VARCHI, Firenze, 1549 and 1590, 4to. is entitled, Qual sia più nobile la Pittura o la Scultura? Gli Onori della Pittura, e della Scultura, Discorso di Gianb. BELLORI, Lucca, 1677, 4to. Pregi della Pittura, di Dom. Palletta, Roma, 1688, 8vo. La Pittura in Giudizio, ovvero il Bene delle oneste Pitture, ed il Male delle Oscene, di C. Gregor. ROSIGNOLI, Venezia, 1696, 12mo., and another edition at Bologna, 1697, also in 12mo. Le tre belle Arti in Lega con l'Armi per difesa della Religione, Oraz. di Venc. LUCCHESINI, Roma, 1716, 8vo. Orazione in Lode della Pittura, Scultura, ed Architettura, da Nicolas FONTINGUERI. This tract is printed in the second volume of the Prose degli Arcadi, Rome, 1718, 8vo. Orazione della Pittura, Scultura, ed Architettura, giovano per l'acquiste delle Scienze, da Vinc. SANTINI, printed in the third volume of the same work. Orazione in Lode della Pittura, Scultura, ed Architettura di Giambattista Alessandro MORESCHI, Bologna, 1781, 8vo. Esame ragionata sopra la Nobiltà della Pittura e della Scultura, per Nicolas PASSERI, Napoli, 1783, 8vo.

In the Spanish language, the most esteemed works on the same subjects are:—Discorsos apologeticos en que se defiende la Ingenuidad del Arte de la Pintura, que es liberal y noble de todos Derechos, por Juan de BUTRON, Madrid, 1626, 4to. Por el Arte de la Pintura, por D. Juan XANREGUI, Madrid, 1633, 4to.

In French:—Eloge de la Peinture, par Philippe ANGELE, Paris, 1642, 12mo. Ichnographie; ou, Discours sur les quatre Arts d'Agriculture, Peinture, Sculpture, et Gravure, avec des Notes historiques, cosmographiques, chiffres, Lettres initiales, Logogriphes, &c. par M. HEBERT, Paris, 1767, 5 vols. 12mo.

In English:—A Parallel between Poetry and Painting, by DRYDEN, Lond. 1695, 4to., inserted as a preface to that great poet's translation of Du Fresnoy. The various editions of the Lectures of REYNOLDS, BARRY, FUSELI (some passages from whose work have been extracted in the course of this article), OPIE, WEST, &c. The Artist; a Collection of Essays on Art, by various English artists, edited and conducted by PRINCE HOARE, Esq. London, 1809, 2 vols. 4to.

Our intention being more to direct our readers to scarce and valuable foreign works, than to well known English treatises, this portion is rendered necessarily brief.

In the German language are to be found; a reply to the following question:—Does Painting possess any influence over a state? Hamburgh, 1763. Advice to young Artists to apply themselves to Literature, by H. de SONNENFELS, Vienna, 1768, 8vo. An Inquiry whether Painting produces a greater effect than Music. A Dialogue, by HERDER, inserted among the Miscellaneous Works of that author, published at Gotha, 1785, in 8vo.

The principal Lexicons and Dictionaries on Painting are:—Dictionnaire abrégé de Peinture et d'Architecture, où l'on trouve

les principaux Termes de ces deux Arts, avec leur Explication, la Vie abrégée des grands Peintres et des Architectes célèbres, et une Description succinte des plus beaux Ouvrages de Peinture, de Sculpture, et d'Architecture, soit antiques, soit modernes, par l'Abbé MARSY, Paris, 1746, 2 vols. 8vo. Dictionnaire portatif des beaux Arts, par LACOMBE, Paris, 1766, 8vo. Dictionnaire portatif de Peinture, Sculpture, et Gravure, avec un Traité pratique des différentes Manières de peindre, par D. Ant. Joseph PERNETTY, Paris, 1757, 8vo. Dictionnaire Iconologique; ou, Introduction à la Connoissance des Peintres, Sculptures, Estampes, par M. PREZEL, Gotha, 1758, 8vo. Dizionario portatile delle belle Arti, che contiene quanto è di più remarchevole nella Pittura, Scultura, Intaglio, &c., colla Vita de' più celebri Professori delle medesime Arte, Venezia, 1758, 8vo. Nouveau Dictionnaire des Peintres, pour acquérir une Connoissance exacte des bons Tableaux anciens et modernes, avec un Appendix de quelques Monogrammes, par Louis de WINCKELMANN, Aug. 1796, 8vo. (in German). Dictionnaire des Arts de Peinture, Sculpture, et Gravure, par WATELET et LEVESQUE, Paris, 1792, 5 vols. 8vo. Théorie genérale des beaux Arts, rédigée par Ordre alphabétique, par J. G. SULZER, Leipsick, 1793, 4 vols. 8vo. (in German).

On the preservation of pictures we may consult, Recueil des Mémoires et diverses Expériences, faites au Sujet de la Conservation des Tableaux, avec un Discours sur l'Incorruptible, par G. DAGLY, Berlin, 1706, 8vo.

On the origin, antiquity, and history of painting among different nations, we may cite, Joa. Nicolai FUNCII, Diss. de Picturæ Usu et Origine, with his Dissertationes academicæ, 1746, 8vo. 470th and following pages. Lettere dell' Origine, Uso, ed Abuso della Pittura, in the Lettere scelte del Abbate Pietro CHIARI, Venice, 1750, 8vo. page 172. De l'Ancienneté de la Peinture, par FRAGUIER, to be found in the first volume of Mémoires de l'Académie des Belles Lettres. On the Origin and History of the Art, by STUDEMUND, Jena, 1767, 8vo.

On the history of painting in general—Histoire des Arts qui ont rapport au Dessin, divisée en trois Livres, où il est traité de son Origine, de son Progrès, de sa Chute, et de son Rétablissement, par MONIER, Paris, 1705, 8vo. The Perfect Painter; or, a History of the Origin, Progress, and Improvement of Painting, 1730, 12mo. Introductio ad Historiam Artis Delineatoriæ, by Peter CINER, included in his Dissertationes Litterariæ, Florence, 1742, 8vo. Essai d'une Histoire des Arts du Dessin, par A. F. BUSCHING, Hamburgh, 1761, 8vo. Della Patria degli Arti del Disegno del Gherardo d'ARCO, Cremona, 1785, 8vo. Anecdotes des Beaux Arts, contenant tout ce que la Peinture, la Sculpture, la Gravure, l'Architecture, et la Vie des Artistes offrent de plus curieux et de plus piquant chez tous les Peuples du Monde, depuis l'Origine de ces différens Arts jusqu'à nos Jours, Paris, 1776, 8vo. 3 vols. Domenico MANNI, del vero Pittore Luca et del Tempo del suo fiorire, Florence, 1764, 4to. Dell' Errore che persiste di attribuirsi le Pitture al S. Evang. by the same, Florence, 1766, 4to.

On the state of painting among the Greeks and Romans:—De l'Amour des beaux Arts, et de l'extrême Considération que les Grecs avoient pour ceux qui les cultivoient avec Succés, par CAYLUS, &c. in the twenty-first volume of Mémoires de l'Académie des Belles Lettres. Histoire de la Peinture ancienne, extraite de l'Histoire naturelle de Pline, avec le Texte Latin, corrigé sur les Manuscrits de Vossius et sur la première Edition de Venise, et traduite en François par D. DURAND, London, 1725, folio. We may recognise as a continuation of this work, the Treatise of the Count de CAYLUS on the Pictures of Polygnotus, on several Passages of Pliny relating to the Arts, on the Picture of Venus, by Apelles, &c. in the 19th, 27th, 29th, and 30th vols. of Mémoires de l'Acad. des Inscriptions et Belles Lettres. The third and fourth parts of the work entitled Gallus Romæ Hospes, par L. MONT JOSIEU, Rome, 1585, 4to. (and to be found in the ninth volume of the Trésor of Gronovius), treat of antique sculpture and painting. De l'Origine de la Peinture et des plus excellens Peintres de l'Antiquité, Paris, 1660, 4to. Des Peintres anciens et de leurs Manières, in the tenth volume of Nouveaux Choix des Mercures. Joann. FONSECA, de Pictura veterum. Delle Pittura antica, da G. B. BELLORI, Venice, 1697, 4to. Treatise on ancient Painting, containing Observations on the Rise, Progress, and Decline of that art among the Greeks and Romans, &c., by George TURNBULL; adorned with fifty pieces of ancient Painting discovered in the ruins of old Rome, accurately engraved from drawings of Camillo Paderni, Lond. 1740, fol. Inquiry into the Causes of the extraordinary Excellency of ancient Greece in the Arts, London, 1767, 8vo. In the Archæologia Litteraria of ERNESTI, in that

of MARTINI, and in that of SIEBENKEES, appear chapters on painting among the ancients. Sur la Peinture des Anciens, par FALCONET, in the sixth volume of his works, Lausanne, 1781. Recherches sur l'Origine, l'Esprit, et le Progrès des Arts de la Grèce, sur leur Connexion avec les Arts et la Religion des anciens Peuples de l'Inde, de la Perse, du reste de l'Asie, de l'Europe, et de l'Egypte, London, 1785, 4to. Sur la Peinture des Anciens, servant de Supplément à l'Histoire de l'Art, par A. RIEM, Berlin, 1787, 4to. Observations on the Art of Painting among the Ancients, by COOPER, in the third volume of Memoirs of the Literary and Philosophical Society of Manchester, 1790, 8vo.

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PALACE. [*palatium*, Lat.] *In architecture.* The term generally applied to the dwelling-houses of kings and princes.

There is some difference of opinion as to the derivation of the Latin word *palatium.* Procopius derives it from a Grecian called Pallos, who gave his own name to a splendid house which he had built: adding, that the Roman emperor Augustus, *after him*, applied the name palatium to the house of the Roman emperors on the hill, which, for that reason, was deno-

minated the Palatine Mount. On the other hand, it has been contended, that Romulus's house, in which Augustus lived, was properly called palatium *because* situated on the *Palatine* hill. However this be, palatium, at first doubtless a proper name, became at length, not "like *homo*, common to all men," but, in a similar way, common to all the habitations of sovereigns. Neither is it restricted to these: for, taking different additions according to the quality of the inhabitants, we speak of *imperial* palace, *royal*, *pontifical*, *cardinal*, *ducal*, *episcopal*, &c. Nay, it is customary in China to build palaces in honour of celebrated ancestors: and in the year 1263, Hu-pi-lay, of the Mogul empire (the first who borrowed the Chinese custom), built one for his ancestors.

In the Ancient Universal History, we have an account of a most magnificent palace in Upper Egypt, not far from Aswan (the ancient Syene), the ruins whereof are so extensive as to impress the mind of the spectator with amazement. It is as large as a little city, having four avenues of columns leading to as many porticoes. At each gate, between two pillars of porphyry, stand two gigantic figures of fine black marble armed with maces. The avenues consist of columns set three and three together, in a triangle, on one pedestal: on the chapiter of each triangle is placed a sphinx and a tomb alternately. Each column is seventy feet high, all of one stone. There are in all the four avenues about five or six thousand of these columns, a great many of which are fallen down.

The palaces of modern Europe are certainly not distinguished by magnificence of this description. They are very often, more particularly, perhaps, in our country* (and after a degree in Germany and Holland), observable rather on account of their extent than their purity or brilliancy of style as buildings. The interior, it is true, generally makes amends, through the exertions of the upholsterer, for the baldness of the elevation, and extent itself possesses the principle of grandeur; but in Paris, and in the principal towns of Italy, these edifices have other characteristics, and are some of them as noble and beautiful in point of external display as they are profuse of ornament in their interiors.

These, however, sink dreadfully in comparison with the superb structures of the ancient Roman emperors, and, in respect of vastness, to the residence of the Emperor of China at Pekin.

Homer gives us details with regard to the construction of the palaces of the kings in the heroic ages. These descriptions are to be taken with a great deal of reservation. They are, most likely, in part ideal, in part embellished, and possibly taken from edifices erected long after the reputed era of the siege of Troy. At all events they are curious, even as affording an evidence of the notions entertained by the illustrious old Grecian on the subject. In the sixth book of the Iliad, the palace of Priam is represented as a vast edifice, the lower part of which was composed of porticoes of stone and covered galleries, beneath which were fifty chambers richly decorated, for the fifty sons of Priam. In front of this edifice, and in the middle of the court-yard, stood another of stone, in which were twelve beautiful rooms for the daughters of Priam. Paris, who is represented as a prince possessing himself some knowledge of architecture, brought to Troy several architects to build him a palace. This was situated between those of Priam and Hector, and like those included many apartments.

In the earliest periods of their history, the Romans applied the word *domus*, not only to ordinary houses, but also to the habitations of the great, and even to those of their sovereigns. Even in the time of the voluptuous madman, Nero, the celebrated new palace built by him was denominated *domus aurea Neronis*, Nero's golden house. This sumptuous palace surpassed in profuse splendour, as well as in dimensions, all which either had preceded or have succeeded it. According to Suetonius, the court in which was the colossal statue of Nero was adorned with three ranges of porticoes, each a mile in length. The gardens attached to the palace were also of a prodigious size, and contained a sort of pond or lake, which Suetonius states might be said to resemble a sea, and on the banks of which stood clusters of elegant buildings, each like a little town. The imperial portion of the building was embellished with unheard-of magnificence. Gold, jewels, and other articles of value were lavished around with an unsparing hand, while the essences and perfumes fuming up on all sides bore testimony to

* We are happy, however, to say, that a royal palace is now building, by Mr. Nash, in front of Buckingham House (the greater part of which is to be removed for the purpose), which will, it is understood, be rendered worthy the residence of the chief magistrate of this powerful empire. Its elevation will be Grecian, and a copy of the Roman arch of Constantine is to be placed before the building.

the effeminate luxury of this worse than rival of Sardanapalus. The whole of this surpassing structure has been demolished centuries since, and it would be well for the outraged feelings of humanity if the infamy of its wretched owner had passed away with the walls he constructed. On part of its site (to obtain which Nero had destroyed a whole neighbourhood), Vespasian afterwards caused the celebrated Colosseum to be erected.

The palace of Diocletian, at Spalatro, built by that emperor to spend his latter years in is still (even in ruin) one of the most remarkable among the relics of ancient art. It had the figure of a parallelogram; was six hundred and thirty feet in length, and five hundred and ten in breadth. Its principal façade, which fronted the sea, was decorated with a superb colonnade, which is almost entirely preserved: it was composed of fifty columns, of which forty-two remain: this colonnade formed a gallery twenty-five feet broad, which, in its length, occupied the entire façade. For further details respecting this once splendid mansion, the reader is referred to the *Voyage Pittoresque* of M. Cassas in Istria and Dalmatia, Paris, 1802, folio, where drawings will be found of all those portions of Diocletian's palace still existing. M. Durand, in his *Paralèle des Edifices de tout genre*, has collected various palaces of different eras and different nations in the same plates, for the purpose of comparison. The ancient palaces, after Piranesi, are represented in plates 16, 43, 45, and 46, and amongst them the palace of Diocletian, the golden house of Nero, &c.

The palaces of Italy, in addition to other attractions, possess that of containing many of the works of the greatest masters in the art of painting. Amongst the foremost of these structures may be enumerated the Aldobrandini, the Borghese, the Pitti, Roispigliosi, Barberini, Corsini, &c.

Palæography. [πάλαιος, ancient, and γράφω, to write, Gr.] *In archaiology.* The knowledge of ancient manuscripts. See Inscriptions.

Palæstræ. [πάλαιστρα, from πάλαίω, to wrestle, Gr.] *In archaiology.* This denomination belongs, properly speaking, to that part of the ancient Grecian γυμνασιον more particularly appropriated to gymnastic exercises, such as wrestling, quoiting, throwing darts, and other similar games. Wrestling appears to have been amongst the very earliest corporeal exercises. In the heroic or fabulous ages, Hercules and Theseus are said to have overcome in wrestling Anteus and Cercyon, the reported inventors of the exercise. Theseus was the first who is said to have united address and skill to bodily force in this kind of combat, and by him were established the public schools wherein the practice was taught on scientific principles. The γυμνάσιον, or *gymnasium*, contained also baths, which were thrown open for the use of the public, as well as for the refreshment of the youths who had been engaged in the games abovementioned; and likewise schools or classes wherein philosophy was taught. The term palæstræ was, however, often vernacularly applied to the whole of the building, notwithstanding its derivation clearly proves that its application should be more limited. The wise Grecians were well aware how desirable it was to provide for the health and accomplished developement of the bodily functions as well as the mental ones; they knew indeed how much the latter depended on the former; and accordingly we find them adopting, as a matter of state policy, establishments wherein their youth were stimulated to all manly and healthful sports—all those athletic exercises by which the ancients rendered the body pliant and nervous, and enabled the muscles to do their offices with treble effect. We are glad, by the way, to perceive that gymnastic exercises are growing daily more common in our own country, and we cannot too strongly recommend their adoption and pursuit in all families wherein there are boys to be brought up.

Barthelemi's Anacharsis furnishes us with the following account:—"The palæstræ are nearly of the same form with the gymnasia. We visited the apartments appropriated to all the species of baths; those where the wrestlers leave their clothes, when they rub their bodies with oil to render their limbs supple, and where they roll themselves in the sand in order to give their antagonists a hold.

"Wrestling, leaping, tennis, and all the exercises of the Lyceum were here repeated before us with greater varieties, and with more strength and skill on the part of the performers. Among the different groups before us we distinguished men of the most perfect beauty, and worthy of serving as models for artists: some with vigorous and boldly-marked outlines, as Hercules is represented; and others of a more slim and elegant shape, consistent with the description of Achilles. The former, devoting themselves to wrestling and boxing, had no object but to increase their bodily strength; the latter, educated

to less violent exercises, such as running, leaping, &c. confined themselves to acquirements of agility."

Vitruvius asserts most positively that there were never any *palæstræ* at Rome. See APODYTERIUM, BATH.

PALETTE. [Fr.] A little oval table, or piece of wood or ivory very thin and smooth; on and round which the painter places the various colours he has occasion for, that they may be ready for the brush.

The middle part serves to mix the colours on, and to make the several tints required in the work. This instrument has no handle, but in the place thereof, a hole at one end, to put the thumb through to hold it.

PALLA. [Lat.] *In costume.* A large upper robe hanging down upon the ground, and the use of which, together with that of the long tunic called *stola*, distinguished the ancient Roman females of quality from those of the lower classes.

PALLADIUM. [from Παλλας, Minerva, Gr.] *In archaiology.* This celebrated statue of the goddess Pallas was about three cubits high, and represented her as in a sitting posture, holding a pike in her right hand, and a distaff and spindle in her left.

The palladium is fabled to have fallen from heaven near the tent of Ilus at the time that prince was employed in building the citadel of Ilium or Troy; and Apollo, by an oracle, declared that that city should never be taken whilst the palladium was contained within its walls. Hence, the assailants of Troy became exceedingly anxious to get possession of this treasure; and Ulysses, accompanied by Diomede, undertook to purloin it. Having, by stealth, entered the citadel at night, they stole the palladium away, the consequence of which act was the fall of Troy. The goddess, however, did not fail, through her image, to testify her wrath at this ungallant violence, the palladium appearing at the period of its capture to receive life and motion. In allusion to this Virgil makes Sinon say:—

"Scarce to the camp the sacred image came,
When from her eyes she flashed a living flame:
A briny sweat bedewed her limbs around,
And thrice she sprung indignant from the ground;
Thrice was she seen with martial rage to wield
Her ponderous spear, and shake her blazing shield."
Pall's Æneid, ii. 228.

It is also averred, that anciently there existed a statue of Pallas at Rome which was held to be the veritable heaven-descended palladium above spoken of; that it was brought into Italy by Æneas, deposited in the temple of Vesta, and secured, as well as might be, from capture, by the construction of several others made exactly similar to it.

The carrying off the palladium has from ancient times been a favourite subject among artists. Amongst the most considerable of those works of sculpture, however, which were framed on it, one only remains still in existence—a basso rilievo of marble preserved in the Spada Palace. Nevertheless, a passage in the *Museum Florentinum*, p. 68, sets forth that Gori was acquainted with several other antique marble monuments upon which the purloining of the palladium by Diomede was represented. Upon the Iliac table we see Diomede and Ulysses issuing forth from the gates of Troy. Pliny makes mention of an artist of the name of Pytheas, who, upon a vase, depicted in rilievo, Ulysses and Diomede stealing the palladium. A great number of engraved gems present the same story at different points of it, and may be said altogether to form a mythic circle of the raising of the palladium. According to the moment of action which each artist has chosen, we may separate the different gems which represent this subject into five classes.

The first class is that in which Diomede is already in the interior of the Trojan temple of Minerva, without having as yet laid hands on the palladium.

The second class comprises those stones upon which Diomede is figured as just on the point of committing the theft.

In the third class we may range all those stones which represent Diomede as having consummated the theft, and although holding the palladium in his hand, is still seen within the temple of Minerva. This division is the most numerous, and, in respect of art, the most important. We may subdivide it into two branches: the first, that wherein Diomede is represented alone; the second, that in which he is accompanied by Ulysses. Tassie's catalogue affords the most complete enumeration of stones of this class.

The fourth class comprehends those gems whereon Diomede is engraved as just on the point of escaping from the temple of Minerva in possession of the stolen treasure; whilst the fifth and last class comprises all that series of monuments representing Diomede and Ulysses returning to the Grecian camp.

PALLAS. One of the names of Minerva, probably given her either because she slew the giant so called, or otherwise from the spear which she appears in some of her

representations to *brandish* in her hands (παλλιον).

PALLIUM. [Lat. from παλλιον, Gr.] *In costume.* A long wrapping gown, or sort of upper garment worn by the Greeks, and subsequently adopted by the Romans. The shape of this vestment has been differently reported: some authors having described it as being square, and others as circular or oval. The manner in which it was worn is now also become uncertain: one thing, however, appears clear, namely, that it was never attached by clasps or hooks.

From this term springs the word *pall*, which denotes the rich pontifical garment worn by the popes, patriarchs, primates, and metropolitans of the Romish church over their other vestments; and which is in the shape of a band or fillet three inches broad, encompassing the shoulder; whence it has been denominated by certain writers *superhumerale*. Both behind and before are pendents, or strings, about a palm in length, with small laminæ of lead rounded at the extremities, and covered with black silk with four red crosses.

PALM. [*palma*, Lat.] *In sculpture, engraving, and measurement.* The branch or bough of the palm tree is found engraved upon a great number of medallions and other monuments of ancient art. It is sometimes the symbol of victory, because in the triumphal days the conqueror, besides his crown, bore also a palm branch; and sometimes of stability of empire, the palm tree being a very sturdy plant. It likewise expresses symbolically rejoicing, abundance, felicity. It is often observed in the hand of Hercules, of Juno, Jupiter, Mars, Mercury, Venus, and, above all, Minerva. At Rome they gave it to personifications of Liberty, Fortune, or Peace, as well as to representations of Julius Cæsar, of Augustus, and other emperors. Among the early Christians, the palm was considered an attribute of martyrs.

The term *palm* is likewise used by the Italians to express a measure of length. It is necessary that this should be understood, inasmuch as it is employed by several authors that treat of antiquity, such as Winckelmann, the editors of the Antiquities of Herculaneum, Visconti, &c. This measure differs in the acceptation of the inhabitants of different parts of Italy, from eight to nine inches.

PALMETTA. [*palmette*, Fr.] *In sculpture.* A little ornament of sculpture, in form of the leaves of the palm tree, and which is cut upon the mouldings of architecture.

PALMYRA in the Desert, or TADMOR. *In the history of the arts.* A noble city of ancient Syria, at present in ruins, and said to have been originally built by Solomon. Learned men, however, have been much divided on this point. At all events, it is startling to find, in the Desert of Syria, at a considerable distance from the sea, with but a precarious and scanty supply of water, and in no apparent connexion with any great monarchy, remains of a city which must almost have rivalled, in extent and splendour, Rome itself, the mistress of the world, and the grand emporium of Grecian art.

The origin of the name of this interesting place is sufficiently obvious: the word Tadmor, as well as Palmyra, signifying, in the Syrian and Latin languages, a region of palm trees. The site of the town, in fact, presents one of those spots of verdure which, rarely to be met with in the deserts of Arabia and Egypt, spring up to redeem the horrors of the sandy wilderness around them.

This magnificent city was situated to the north-east of Damas, between that place and the Euphrates, in a tract of land fertile and watered with springs. The verdant part of the ground was, perhaps, in remote times far more extensive than it is at present, the sands having without doubt encroached in a considerable degree on the tract calculated for bearing the fruits of the earth. A place possessed of the advantages we have mentioned was soon made a point of resort for the caravans by which the various rich commodities of India were transported to European countries. Palmyra thus grew to be an independent and wealthy city, and appears to have been permitted by the Romans, during their Parthian wars, to maintain a strict neutrality. Trajan, however, incorporated it with the imperial Roman state, and it should seem that during the period in which it held the subordinate rank of a Roman colony (namely, for a century and a half subsequently), those temples and palaces of Grecian architecture, whose widely extended ruins have occasioned so much speculation, were erected.

In old times, Palmyra was doubtless encompassed by palms and fig trees, and it might probably have been reduced to its present forlorn and miserable appearance by the oceans of sand drifted over it by whirlwinds. The walls of the city are flanked with square towers; and are of the extent of three miles in circumference.

The celebrated ruins of Palmyra were discovered in an accidental manner some-

thing beyond a century ago, by certain English travellers from Aleppo. The one most worthy of notice is that of the temple of the Sun, the remains of which now spread over a square of two hundred and twenty yards. It was surrounded by a stately wall, built of large square stones, and ornamented with pilasters both within and without, to the number of sixty-two on a side. Withinside the court are the remains of two rows of very noble pillars, thirty-seven feet high, and having capitals of the most exquisite workmanship. Fifty-eight of these remain entire: as, however, they appeared to have been continued round the whole court, and to have supported a double piazza, there must originally have been a greater number. The walls on that side of the piazza opposite to the temple were evidently the most roomy and elegant. At each end of this line are two niches for statues, carved with the greatest possible beauty and skill, together with their borders, supporters, canopies, and pedestals. The wretched hovels of the few barbarians who reside about the spot now fill the space within this enclosure, which space was formerly an open court, the temple itself standing in the middle thereof, encompassed by another row of pillars, of a different order, and much higher, being fifty feet high: of these sixteen only remain. The entire space contained within these pillars is fifty-nine yards in length, and about twenty-eight in breadth. The temple is thirty-three yards in length, and thirteen or fourteen broad, pointing north and south. A most magnificent entrance goes exactly into the middle of the building, on the west side, on the remains of which are some vines and clusters of grapes, carved in the boldest and most masterly imitation of nature imaginable. Just above the door a pair of wings are still visible, extending its whole breadth, but the body to which they belonged is totally destroyed, nor can it now be clearly determined whether it was that of a cherub or an eagle, sundry representations of both being discernible on other portions of the building. The windows of this edifice, which were not large, were narrower at top than at bottom. The north end is ornamented with the most curious fret-work and bassi rilievi; and in the centre is a dome or cupola about ten feet diameter, apparently either hewn out of the rock or moulded of some composition which time has rendered equally hard.

North of this spot is an obelisk, consisting of seven large stones, besides its capital and the wreathed work about it. In all probability a statue formerly surmounted this obelisk (which is about fifty feet high), and it might have been destroyed by the Turks in their zeal against any thing looking like idolatry. About a quarter of a mile from this pillar, to the east and west, are two others, besides the fragment of a third.

At the distance of one hundred paces from the middle obelisk, straight forward, is a grand entry to a piazza, which is forty feet broad, and more than half a mile in length, enclosed with two rows of marble pillars, twenty-six feet high, and eight or nine feet in compass; one hundred and twenty-nine of these yet exist; and originally their number must have exceeded five hundred. The upper end of the piazza was shut in by a row of columns, standing somewhat closer than those on each side. A little to the left are the ruins of a sumptuous edifice, once apparently a banqueting house. It is built of better marble, and finished with still greater elegance than the piazza. The pillars which supported it were of one entire stone, which is so strong, that one of them which has fallen down has yet received no injury. It measures twenty-two feet in length, and in compass eight feet nine inches. In the west side of the piazza are several apertures for gates into the court of the palace. Each of these was adorned with four porphyry pillars, not standing in a line with those of the wall, but placed by couples in the front of the gate facing the palace, two on each side. Two of these only remain entire, and but one standing in its place. They are thirty feet long, and nine in circumference. On the east side of the piazza stand a considerable number of marble pillars, some perfect, but the greater part mutilated. At a small distance are the remains of a lesser temple, also without a roof, and the walls much defaced. Before the entry, which looks towards the south, is a piazza supported by six pillars, two on each side of the door, and one at each end. The pedestals of those in front bear several inscriptions both in the Greek and Palmyrene tongues, but which are now become illegible.

Among these ruins many sepulchres are to be found, which are ranged on each side of a hollow way, towards the north part of the city, and extend more than a mile. These are all square towers, four or five stories high; but though similar in form, they yet differ greatly in magnitude and splendour. The outside is of common

stone, but the floors and partitions of each story are marble. There is a walk across the whole building, just in the middle; and the space on either hand is subdivided into six partitions by substantial walls. The space between these partitions is wide enough to receive the largest corpse; and in these niches there are six or seven piled upon one another.

Besides the monuments of art we have already mentioned, there have been discovered twenty-six inscriptions in Greek, thirteen in Palmyrene, and one in Latin. The most ancient of these is of the third year after Christ, and the most modern of the time of Diocletian. The inscriptions in the Palmyrene language and character have called forth all the ingenuity of the learned. Joseph Scaliger was compelled to admit that he could not understand these characters. Samuel Petit, in 1632, occupied himself a good deal in endeavouring to decipher them, but without success. Galand and Spon, men of approved sagacity in matters relating to antiquarian research, put forth conjectures on the subject of a very vague and unsatisfactory nature. Several years after, the actual existence of a Palmyrene language was questioned by Noris,—a point which was, however, set at rest by the report made of the monuments and inscriptions by the English travellers beforementioned. The Abbé Barthelemy at length, subsequently to the publication of the Travels of Wood and Dawkins, succeeded in dissipating much of the darkness which hung over this subject. In the year 1754 this learned antiquary read to the Academy of Belles Lettres, a *Mémoire sur l'Alphabet et sur la Langue dont on se servoit autrefois à Palmyre*, printed in the twenty-sixth volume of the Memoirs of the Academy of Inscriptions; and since that time it has been no longer doubted but that the inhabitants of Palmyra possessed both distinct characters and alphabet.

The following works may be consulted with respect to the ruins of Palmyra:—*Observations on the State of Palmyra*, published about the year 1700, by Doctor Halley. Seller, *On the Antiquities of Palmyra*, London, 1696, 8vo. Halliffax's *Voyage to Tadmor*, 8vo. London, 1705. But the most important of all is the work of Messrs. Wood and Dawkins, entitled *The Ruins of Palmyra, otherwise Tadmor in the Desert*, London, 1753, folio, with fifty-seven fine engravings. M. Cassas, in his *Voyage en Syrie*, has also exhibited some admirable prints of the interesting relics of Palmyra and its neighbourhood.

Palombino. *In statuary.* A species of marble so called among the Italians, the colour of which is milk-white.

Paludamentum. [Lat. id quod *palla.*] *In ancient costume.* A sort of upper vestment which the military chief, or emperor (see that word), threw over his cuirass, and which was commonly fastened on the right shoulder. This kind of mantle or cloak was, like most of the other Roman habits, of wool, at least before they acquired the practice of using silk and suchlike richer substances. When it denoted the wearer to be of imperial rank, it was adorned with purple and gold.

This garment owed its origin to the Greeks, who transmitted the use of it to the Etruscans: it is found represented on several antique engraved stones; such, for instance, are those which depict the seven chiefs before Thebes, in the first volume and 218th page of Winckelmann's *History of Art.* It is remarked likewise on many monuments of art incontestably Etruscan, exhibited by Dempster, *Etruria Regalis*, first volume, and 70th, 71st, and 72d plates, &c. It somewhat resembled the χλάμυς of the Greeks, than which, however, its folds were more ample. In setting forth on any military expedition, the general always assumed the paludamentum at the Capitol, and on his return, at the gate of the city, laid it aside and substituted the *toga.* The cuirass is almost always seen to accompany the paludamentum, in the representation upon ancient medals.

Pal datus. [Lat.] *In archaiology.* Name given to a general fully attired in the military habit.

Pampinata. [Lat. from *pampinus*, a vine-leaf, which, according to some, is from *pando*, to spread, in allusion to the shape of the leaves.] *In modelling and sculpture.* The designation given to those vases ornamented with the leaves of the vine.

Pampre. [Fr.] An ornament of sculpture composed of the vine leaves, and of bunches of grapes, with which they sometimes decorated the hollow of the circumvolutions of twisted columns.

Pan. [Gr. Πάν, from πάω, to feed.] The god of shepherds, of huntsmen, and of all the inhabitants of the country. According to Homer, he was the son of Mercury by Driope. The worship of Pan was well established, particularly in Arcadia, where he gave oracles on Mount Lycæus. This god was likewise adored with the greatest solemnity all throughout Egypt. His statues often, for mysterious reasons, represented him as a goat. He was the

emblem of fecundity, and regarded as the principle of all things. His horns were said to represent the rays of the sun, while the brightness of the firmament was expressed by his vivacity and ruddy complexion. The star which decorated his breast was the symbol of the sky, and his hairy legs and feet denoted the inferior parts of the earth, such as the woods and plants.

The figures of Pan are usually naked, to express agility. Silius speaks of his springing from rock to rock, and gives altogether a fuller description of him than any other Roman poet. He crowns him with pine branches, with which he shades his forehead. He invests him with a doe's skin over his left shoulder, and a *pedum* in his right hand; and represents him in several picturesque attitudes. (Silius, l. xiii. v. 347). This account of Pan is introduced where the poet is speaking of the Roman army approaching Capua to destroy it, after Hannibal had quitted Italy. Jupiter (says the poet), moved by the distress of the Capuans, sends Pan to soften their incensed enemies, which he effectually did. Silius, on this occasion, calls Pan the Mild God, or the inspirer of mildness. (Sil. xiii. v. 320). There is a terminal figure at Florence which they call Pan, whose face agrees with this character. He has a goat on his shoulder, and a little milking vessel in his right hand. This is the Pan, perhaps, invoked by Virgil (Geo. i. v. 18.)

Pan is well known under the formidable character of the inspirer of sudden frights and fears, especially such as happened in an army without any real foundation, and are to this day called PANIC fears. These causeless alarms are described by the Roman poets, and the artists, agreeably to what they say, give Pan sometimes a face more terrible than that of Mars himself. The Athenians had a statue of Pan, with a trophy on his shoulders, like the figures of Mars, he having often assisted them in their wars, especially at the battle of Marathon. This appears from two inscriptions in the collection of Greek epigrams. Pan's face appears very terrible on a gem in the Strozzi collection; and probably it was from some of these horrific representations of him our modern artists have borrowed the idea of a demon. This conjecture becomes more probable when it is recollected that the ancients always gave Pan a tail, horns, and cloven feet, like a goat, in which shape the devil is most usually said to appear. Pan, by Ovid, is called the *goatish* god (Met. xiv. v. 515).

PANATHENÆA. [Πᾶν, all, and Ἀθήνη, Minerva.] *In archaiology.* A feast held at Athens in honour of the goddess Minerva, or, according to the Greeks, Ἀθήνη.

There were two kinds of Panathenæa: the greater, celebrated every five years, and the lesser annually, or, as some say, every three years. The ceremonies were alike in both, with the exception of a *peplus* or banner, used only at the former, on which the achievements of the goddess were depicted in embroidery, worked by virgins, together with the names of those who had distinguished themselves in the service of the republic. See PEPLUS.

PANCARPI. [πᾶν, all, and καρπος, fruit, Gr.] *In the decorative arts.* Thus are denominated the crowns, garlands, festoons, &c. made of all sorts of fruits, flowers, and leaves, which served to adorn the altars, doors, vestibules, and vases of antiquity. Above all, they were applied to religious purposes. The Pantheon at Rome affords an example of this species of decoration. Our modern ornamenters have often introduced the pancarpi in metal, wood, and stone; but not always successfully or in fine taste.

PANCRATIUM. [πᾶν, and κράτος, strength, Gr.] *In archaiology.* A species of gymnastic exercise, compounded of wrestling and boxing; and in which, as the name implies, the whole body was tasked to its utmost. Thus in the pancratium, the combatant was warranted in employing every allowable artifice; for neither (as in the *cestus*) were their hands or fingers bound up or armed, nor their legs and feet restricted from joining in the contest. With the use of these natural weapons, however, and of none other, they were found frequently to mangle and injure each other seriously; and at length it became necessary to subject this mode of warfare to further restraint. The pancratium was admitted into the olympic games in the twenty-eighth olympiad.

PANDORA. [πᾶν, and δῶρον, a gift, Gr.] *In the mythology of art.* According to Hesiod, the first mortal female who ever lived. She was made with clay by Vulcan at the request of Jupiter, who wished to punish the artifice and impiety of Prometheus by giving him a wife. When this earthen lady had been constructed and endowed with life, the gods all vied in bestowing gifts on her, and hence the derivation of her name. In conclusion, Ju-

piter presented her with a beautiful box, to be given to the man who should marry her: and thus provided, Mercury was instructed to carry her to Prometheus. That wary mortal, however, was on his guard. Knowing Jupiter's character, he suspected the trick, and sent the alluring damsel away. His brother Epimetheus, however, destitute of similar sagacity, married Pandora; and on opening the magical box, out rushed a multitude of evils and distempers, which have ever since continued to haunt and distress mankind. The supreme giver of evil, nevertheless, in some degree counterbalanced his mischief; for *hope* remained at the bottom of the box—the never-failing friend of man, and alleviator of all his sorrows.

The subject of Pandora and her box has proved very suggestive to the imaginations of the poet and painter, and still offers a good mark for the display of the student's ability.

PANDROSEUM. [from πάνδροσος, Gr.] *In the archaiology of architecture.* The name of a temple of small dimensions, situated near both to the temple of Erectheus and that of Minerva Polias; it was consecrated to Pandrosia, that one of the three daughters of Cecrops who remained faithful to the order of Minerva, who had intrusted a casket to their care with instructions by no means to open it.

PANEL. [*panelleum*, Lat. *panean*, Fr.] *In painting and architecture.* See COMPARTMENT.

PANGONIOS. [πᾶν, and γονία, an angle, Gr.] A species of crystal, so called from the great number of its angles.

PANIONIUM. [πᾶν, and Ιων, Ion, from whom the Ionians were descended.] *In archaiology.* The term given to the league established among the twelve principal cities of the Ionians, and to which the accession of Smyrna made a thirteenth. The spot where the deputies of this league assembled to deliberate on their common interests was situated near the promontory of Mycale, and bore also the name of Panionium. Here they erected a temple to Neptunus Heliconius, in which the deputies from the cities offered sacrifices to that deity in common, at the time of their assembling. This building was a remarkable one, for it has been said to have been the first instance of a national structure of the kind. Strabo informs us that this temple of Neptune was destroyed by an earthquake. Modern travellers, such as Pococke, in his description of the East, and Chandler, in the forty-sixth chapter of his Travels in Asia Minor, have none of them succeeded in discovering with exactitude the precise situation of the Panionium. The fête which was wont to be held on these assemblies of the deputies, and by consequence the league itself, appears to have subsisted until towards the middle of the third century of the Christian era, in the reign of the Emperor Trebonianus Gallus. Vaillant makes mention of a Greek medal of this prince, the type and legend of which bore evident relation to the ceremonies of the Panionium.

PANORAMA. [πᾶν, and ὁράω, to see, Gr.] *In painting.* This word is employed to designate the exhibition of a picture circularly disposed round the interior sides of a rotunda, in the middle of which the spectator is placed upon an elevation in such a manner as to enjoy, in all directions, the view of any given country or scene from nature, the extent of which is bounded only by the horizon. Every high point from which an uninterrupted prospect all round may be commanded is, without doubt, according to this definition, a natural panorama. The artificial panorama elaborates and stretches out what perhaps would form but a small portion of the natural one, such as a particular town, landscape, &c. and surrounds you with it in order that the pictorial illusion might become more striking and real by the exclusion of all other objects. To this end the peculiar admission of the light (the aperture for which purpose, at the top of the rotunda, is skilfully concealed from the spectator's eye), greatly conduces, as also does the circumstance of his being kept, by the enclosure of an intermediate space, from approaching sufficiently near the painting to hazard the decrease of its effect. Our ingenious countryman, Mr. Robert Barker, was the inventor of this favourite species of painting, which has since become highly popular, not only in this country, but in those of the Continent. It is now between thirty and forty years since the first panorama was exhibited by him in Leicester Square. It represented the country between Portsmouth and the Isle of Wight, with the view of the sea and the ships of war painted after nature with surprising fidelity.

In France this invention was adopted by two Americans of the names of Fulton and James, with the assistance of the French artists Fontaine, Prévost, and Bourgeois. They successively placed be-

fore the inhabitants of Paris two views of that city itself, taken from different points, and also representations of Lyons, Toulon, London, Rome, Naples, &c. all executed with great care, and received with abundant applause.

But if an English artist be admitted to have introduced to the notice of our ingenious neighbours this interesting discovery, they have returned the compliment by bringing us acquainted with a new modification of it, and one which must certainly be allowed to exceed all former efforts at strength of illusion: we speak of the *Diorama*, recently imported from France, and the exhibition of which has afforded the public so much rational delight. This differs from the panorama chiefly in the circumstance of the picture being square instead of circular, and viewed consequently in front of you instead of around. The effects produced upon the face of the painting by the moderated and *varied* introductions of light are likewise to be ranked among the peculiar charms of the diorama, which is altogether of a higher rank of art than its predecessor. The first paintings exhibited in the diorama were the Valley of Sarnen, in Switzerland, and the interior of Trinity Chapel in Canterbury Cathedral. The illusion of the latter almost amounted to the magical, and would have been still more perfect but for the introduction of a sleeping figure, whose minuteness somewhat contradicted the general feeling of harmony and proportion. The most successful of the pictures more recently exhibited is the Chapel of the Scotish Palace of Holyrood.

The qualities most likely to ensure success to the painter of this species of the art are, as must be evident, great knowledge and attention to the principles of perspective and chiaro-scuro.

PANSTEREORAMA. [πᾶν, στερεὸς, solid, and ὁράω, to see.] *In the art of rilievo.* Works of rilievo which represent in miniature the *tout-ensemble* of towns, or other objects, and which are constructed sometimes in wood, sometimes in cork, pasteboard, or other light and flexible substances. Such are the representations in rilievo of the cities of Paris, London, Lyons, Marseilles, &c. In the Library of the Pantheon at Paris, is a panstereorama of the city of Rome; and at the Hotel of Invalids, in the same capital, is preserved a valuable collection of similar representations in rilievo of the greater part of the fortresses and seaports of France.

PANTHEISTIC. [πᾶν, and θεὸς, god.] *In statuary.* Pantheistic statues or figures are those which bear the signs and symbols of several deities together. Authors differ in opinion respecting their origin: Buonarroti and Passeri refer it to the epoch at which Christianity was introduced into Rome. The allegorical meaning of these figures has also been subjected to dispute: according to some antiquaries, a Pantheistic figure may be said to represent the universe or nature herself. There is one made of antique paste in the collection of Mr. Townley, which has the wings and bow of Apollo, the trident of Neptune, the caduceus of Mercury, the lion's skin of Hercules, &c. It was probably to these sort of pantheistic statues that those inscriptions were dedicated (reported by Muratori and Gruter), in which we read —*Divo Pantheo*, or *Pantheo* alone.

PANTHEON. [id quod *Pantheistic.*] This magnificent edifice, one of the most sumptuous and tasteful remnants of ancient Rome, and the only one of their many beautiful temples which still exists entire, was originally, as its name implies, dedicated to *all the gods;* or, as some aver, to Mars and Jupiter the Avenger; adding, that its name of Pantheon arose from its containing statues of all the Roman deities. It is now converted into a Christian church, and the universality of its application in some measure preserved by its consecration to the *Virgin Mary and all the Martyrs.* The frieze of the portico of this building bears the following inscription: M. AGRIPPA L. F. COS. TERTIUM FECIT; and hence it has been inferred, that to Agrippa (son-in-law of Augustus) is to be awarded the honour of its erection. This, however, is subject to some doubt, and there are pretty clear evidences that the Pantheon existed in the times of the Commonwealth. But be that as it may, it is indisputable that Agrippa greatly improved the edifice, and most likely gave its proportions that air of winning beauty which has since proved so attractive to the eye of the connoisseur.

The form of the body of the Pantheon is round or cylindrical, and its roof or dome is spherical. It is one hundred and forty-four feet diameter within, and the height of it, from the pavement to the grand aperture at top, the same. The order used throughout the building is the Corinthian. The inner circumference is divided into seven grand niches, wrought in the thickness of the wall; six of which are flat at the top, whilst the seventh (opposite the entrance) is arched. Before each niche are two columns of antique yellow marble fluted, and of one entire

block, making in all fourteen, the finest in Rome. The whole wall of the temple, as high as the grand cornice inclusive, is cased with divers sorts of precious marble in compartments. The frieze is entirely of porphyry. Above the grand cornice arises an attic, in which were constructed, at equal distances, fourteen oblong niches: between each niche were four marble pilasters, and between each pilaster marble tables of various kinds. This attic had a complete entablature; but the cornice projected less than that of the grand order. Immediately from the cornice springs the spherical roof, divided by bands, which cross each other like the meridians and parallels of an artificial terrestrial globe. The spaces between the bands decrease in size as they approach the top of the roof; to which, however, they do not reach, there being a considerable plain space between them and the great opening. That so bold a roof might be as light as possible, the architect formed the spaces between the bands of nothing but lime and pumice-stone. The walls below were decorated with lead and brass, over which were works carved in silver; and the roof was covered exteriorly with plates of gilded bronze. From the springing of the roof to the very summit of it there was an ascent by a flight of seven stairs.

The portico of this elegant building is superb. It presents the most majestic aspect, being formed of sixteen grand Corinthian columns of granite, four feet in diameter, eight of which stand in front with an equal intercolumniation all along (contrary to the rule of Vitruvius, who prefers having the space answering to the door of a temple wider than the rest). The tympanum, or flat of the pediment of these columns, was adorned with *bassi-rilievi* in brass; the cross-beams which formed the cieling of the portico were covered with the same metal, and so were the doors. The ascent to the portico was by eight or nine steps. Such was the temple which Pliny felt himself warranted in ranking among the wonders of the world.

We have already noticed the supposition that Agrippa was rather the beautifier than the builder of the Pantheon; and, in fact, it has undergone, at different periods, a variety of alterations and restorations. Xiphilin places it in the number of buildings burnt during the reign of Titus, and Cassiodorus speaks of its reparation by Trajan. We find it also restored by Hadrian, by Antoninus Pius, by Marcus Aurelius, and by Severus. This latter sovereign caused all the names which had been previously inscribed on the Pantheon to be effaced, retaining only (besides his own and his son's) that of its founder. On the architrave appears the following inscription:—IMP. CÆS. SEPTIMIVS SEVERVS. PIVS. PERTINAX. ARABICVS. PARTHICVS. PONTIF. MAX. TRIB. POT. XI. COS. III. P. P. ET IMP. CÆS. MARCVS. AVRELIVS. ANTONINVS. PIVS. FELIX. AVG. TRIB. POT. V. COS. PROCOS. PANTHEVM. VETVSTATE. OBRVPTVM. CVM. OMNI. CVLTV. RESTITIVERVNT. Medals were likewise struck both of the founder and repairer of this temple. The former bear the head of Agrippa, whose statue likewise was erected in the building.

This structure has been despoiled of the statues which formed one of the principal ornaments of its interior, as well as of the vast quantity of bronze which once enriched it. Alaric the Goth, whose incursion into Rome, in the time of Honorius, is well known to the scholar, commenced this abstraction, which was completed by a man who called himself civilized, namely, the Emperor Constantine II., who came from Constantinople for that purpose.

About fifty years before this, Pope Boniface IV. had obtained the Pantheon from the Emperor Phocas for the purpose of turning it into a church, and the artists of those days, perfectly ignorant of the beauties of Greek or Roman architecture, injured, as may be supposed, whatever they laid their hands upon.

From the time Constantine had carried off the brass plating of the external roof, that part was exposed to the violence of the weather, or at best but slightly tiled, till Benedict II. covered it with lead, which Nicholas V. renewed in a better style. It should be noticed, to the honour of the illustrious painter Raffaelle, that he left in his will a considerable sum for the reparation of the Pantheon, wherein his tomb is placed. Several other artists did the like.

Urban VIII. did something towards the restoration of this noble building, but generally in wretched taste; and it must not be forgotten that he stripped the portico of the brazen coverture of the cross-beams, which amounted to such a vast quantity, that not only the huge baldaquin or canopy of the confessional in St. Peter's was cast out of it, but likewise a great number of cannon for the castle of St. Angelo. This pope, who was of the family of Barberini, presented also as much of this metal to his nephew as sufficed for the decoration of his new palace; which gave rise to this memorable and merited pasquinade—

"Quod non fecerunt barbari fecere Barberini."

There was, besides the structure we have been describing, another Pantheon in ancient Rome dedicated to Minerva, as the goddess of medicine. It was in the form of a decagon, the distance from one angle to the other measuring about twenty-two feet and a half. Between the angles were nine round chapels, each designed for a deity; and over the gate was a statue of Minerva.

The Pantheon of Athens also underwent the change into a Christian church of the Greek persuasion, and subsequently into a Turkish mosque. It merited in most respects a participation of title with its more celebrated namesake.

England also has possessed her Pantheon;—alas! that we must use the past tense in speaking of it. This most elegant and magnificent structure, situated in one of the finest streets of the metropolis (Oxford Street), was erected between the years 1768 and 1771, after the design of Mr. James Wyatt. It was held, and deservedly, as one of the finest, if not the very finest, building of its order in Europe. On the 27th January, 1772, it was opened as a place of public entertainment—at first only for the reception of assemblies, somewhat after the plan of Ranelagh. These assemblies occurred three times a week, and on the intermediate days the interior of the building was shown at the somewhat costly rate of five shillings admission.

In the year 1790 the Italian Opera House, in the Haymarket, having been burnt down, the Pantheon was converted into a theatre for the performance of operas; and even in this altered state, drew forth the greatest encomiums on its beauty and accommodation. Two seasons afterwards it suffered itself from fire, and has seldom since been applied to any purpose. The interior of the building is at present stated to be unsafe.

PANTHER. [πάν and θήρ, a wild beast.] *In emblematical painting and sculpture.* This animal was considered one of the attributes of Bacchus, and is very frequently found on monuments which represent that god. In *L'Antiquité expliquée*, vol. 1, pt. 2, pl. 145, Nos. 1 and 3, and in the 5th vol. and 25th plate of the *Pitture d'Ercolano*, Bacchus is accompanied by the panther. It is also symbolical of the god Pan, and figured likewise in the games of the Circus at Rome, where they both attached it to their cars, and caused it to fight. The panther, as well as the tiger, upon both of which Bacchus is often represented as riding, sometimes alone, sometimes with Ariadne, indicates the Indian origin of the god of conviviality; for these animals (and above all, the smaller species called by Buffon the *ounce*), are readily tamed, and, in the East Indies, are trained to the chase of gazelles, roebucks, &c.

We often find, on ancient monuments, the Bacchantes and Mœnades giving wine to panthers or tigers, an office in which Bacchus himself is sometimes employed. Hero of Alexandria, in an important passage found in pages 246 and 247 of *Mathematici veteres Græci*, describes a remarkable automaton representing Bacchus in his temple: round him were seen the Mœnades dancing and playing music; the god himself was seated in the middle, holding in his left hand a thyrsus, and in his right a drinking cup, of the kind denominated *scyphus:* at his feet lay a panther, and when the principal automaton moved, he poured upon the panther either water or milk, which flowed from the thyrsus, or wine which issued from the scyphus. This passage is very curious, inasmuch as it proves that some of our most ingenious discoveries, or supposed discoveries, in mechanism were, in fact, known to the ancients, at least in their principles—thus throwing fresh lustre on the observation of Solomon, that there is nothing actually "new under the sun."

PANTOGRAPH. [πάντα, all things, and γράφω, to write, Gr.] An instrument serving to copy the traits of all sorts of designs and pictures, and to render them, at pleasure, either large or small. It has been invented since the commencement of the seventeenth century, and a good description of it appeared at Rome, A. D. 1631, entitled:—*Pantographice, seu Ars delineandi Res quaslibet per Parallelogrammum lineare, seu Cavum, Mechanicum, Mobile,* &c. &c. 4to. This work, together with the invention of the instrument itself, is attributed to Christopher Scheiner, a Jesuit born in Suabia. A Frenchman, of the name of Langlois, added several considerable improvements.

PANTRY. [*paneterie*, Fr.] *In architecture.* The room in which provisions are reposited.

PAPAL MEDALS. *In numismatics.* These are consecrated to representations of the apotheoses of saints, the wars undertaken for the defence of the Catholic faith, rites and customs ecclesiastical, construction and dedication of churches, &c. The most important works which treat of this subject are:—*Historia summorum Pontificum à Martino V. ad Innocentium XI. per eorum Numismata, ab anno* 1417 *ad annum* 1678, *à* Claudio DUMOLINET, 1679, folio. *Na-*

mismata Pontificum Romanorum à tempore Martini V., usque ad annum 1699, &c. à S. Philippo Bonanni, Rome, 1699, 2 vols. folio. *Antiquiores Pontificum Romanorum denarii olim editi* à Joanne Vignolio, *iterum proditi Studio*, Benedicti Floravantis, Rome, 1734, 4to. *Brere Notizia delle monete Pontificie, antiche e moderne, raccolte da* Saverio Scilla, Rome, 1715, 4to. *Numismata Romanorum Pontificum Præstantiora, à Martino V. ad Benedictum XIV., per* Rodulphinum Venuti, *cortonensem*, Rome, 1744, 4to.

Paper. [παπυρος, from πάω, to feed, and πῦρ, fire, Gr. from which *papyrus*, Lat. and *papier*, Fr.] The derivation of this word requires some explanation. The παπυρος of the Greeks was a certain flaggy shrub, growing on the banks of the Nile, so called from its being applied to keep up the fire, and from this same substance was subsequently constructed the first kind of paper used: and thus, from this remote and obscure origin, sprang the common term now in every one's mouth, and denoting one of the most serviceable and well known articles of daily use.

It would not be consistent with the purpose of this work to describe particularly the different expedients which men in every age and country have employed in order to give stability to their ideas, and to hand them down to their children. When the art of writing was once discovered, stones, bricks, leaves of trees, the exterior and interior bark, plates of lead, wood, wax, ivory, were each and all appropriated. In the progress of society, men invented the Egyptian paper (from the παπυρος); paper of cotton; paper manufactured from the bark of trees, and, in our times, from old rags.

The paper used for drawing, or for coloured maps, is in some mills made from one kind of white stuff, either fine or middling; in others, from a mixture of three or four kinds of stuff of different colours. Not very many years since, the Dutch were almost the only people who possessed this manufacture. The same qualities are requisite in this paper as in those for writing: but the substance must be thicker for drawing on, and the grain a little more raised; as otherwise the pencil would have difficulty in leaving the traces of the objects. Great care is also necessary in the sizing of this paper.

Painters have been in the habit of preparing their paper for drawing, by giving it a dark ground, which spares them much labour of the pencil afterwards where shade is necessary. For this purpose, they take white paper and pass a sponge over it which has imbibed water impregnated with soot, leaving the light places to be formed afterwards. They also use a kind of paper for drawing and engraving which is denominated *tinted* paper. A light colour is passed over the whole ground, which deprives the paper of its original brightness, and makes the light places of the print appear more in rilievo and more luminous.

A common and convenient method for copying prints is to use oiled paper. The manner of preparing this is to take paper which is extremely thin and smooth, and moisten it with a composition, two parts of the oil of walnuts, and one part of the oil of turpentine, mixed well together. A sheet of pasteboard and a sheet of paper are laid on a smooth table; above them are placed two sheets of paper to be prepared, and a layer of the oil applied to the uppermost is sufficient to penetrate both. This may be done to any number of sheets, and a strong sheet of pasteboard is placed over the whole. The heap is afterwards submitted to the press, under which it remains for two or three days, till the oil be completely dry. Paper prepared in this manner has been held to copy very exactly and readily all kinds of figures, plants, &c.; because, being wholly transparent, all the parts of the drawing, whether of light or shade, are easily distinguished.

Engravings require a paper the stuff of which must be pure, without knots, and equally reduced; the grain uniform, and the sheets without folds or wrinkles.

There still remain, in various public libraries and other literary repositories, several ancient manuscripts written on the actual *papyrus* prepared from the leaves of the Egyptian plant. It is worthy of notice, that our two common words—*bible* (or book) and *chart*, are likewise derived, at least in some degree, from the same root; for the Egyptians and Greeks denominated the paper they formed from the leaves of the papyrus βυβλος and χαρτης, and hence the Greek word βυβλιον, a book, and the Latin words *biblia* and *charta*.

Parabola. [παραβολή, Gr.] *In geometry.* A conic section, arising from a cone's being cut by a plane parallel to one of its sides, or parallel to a plane that touches one side of the cone.

Paradise. [παράδεισος, a garden, Gr. from the Hebrew.] *In emblematical painting and sculpture.* In ecclesiastical language this word signifies a garden, or place of eternal blessedness. According to Buonarroti, the earliest Christians symbolized it by a crown of flowers placed near the personage represented, by flowers

strewed around him, or by two trees, between which was placed the saint. This antiquary has given examples in his *Osservazioni di Vasi di Vetro*, plates 16 and 21, No. 1, and plate 18, No. 2.

PARADOS. [*παρὰ*, and *ὁδὸς*, a way.] *In archaiology.* This Greek term signified in general an entrance; and more particularly that grand entrance which, in the Grecian theatres, conducted from without into the orchestra and upon the stage. See THEATRE.

PARALLEL. [*παρὰ*, from, and *ἀλλήλαν*, mutually, or rather equi-distant.] *In geometry.* An appellation given to lines, surfaces, and bodies, every where equi-distant from each other.

The *parallel ruler* is an instrument composed of two rules of wood or brass, &c. of a breadth equal throughout the whole of their length; and so joined together by cross blades as to open to different intervals, accede, recede, and yet still retain their parallelism. Another ruler differs from the former in being double; the advantage of which is, that the two rulers can be moved parallel to each other without sliding endways, as the other does, every part of the moving ruler describing the arc of a circle.

There is another variety of this instrument now by many preferred to the former ones, and which acts by means of a parallel *roller* inserted into the middle of the rule. It is the invention of Mr. Echard, a German, and seems calculated to operate with more certainty than the old rulers, and to be less likely to get out of order.

PARALLELOPIPEDON. [id quod *parallel.*] *In geometry.* A solid figure contained under six parallelograms, the opposite of which are equal and parallel; or it is a prism, whose base is a parallelogram: it is always triple to a pyramid of the same base and height. During those times when good taste reigned amongst the Greeks and Romans, the shape of buildings, &c. never varied far from either a square or parallelopipedon. At length, when they began to grow addicted to a meretricious love for ornament, the pyramidal proportion was substituted for those simpler ones, and thus, in course of time, were originated the principles of moorish-gothic architecture, as appears from the treatise of our countryman, Murphy, on that subject.

PARALYTIC. [*παράλυσις*, paralysis, from *παραλύω*, to unloose, Gr.] *In sculpture.* Balsetti has published, in his *Osservazioni sopra i Cimeteri*, p. 197, a glass vase, upon which is depicted, among other things, the healed paralytick, carrying his bed on his shoulders.

PARANYMPH. [*παρὰ*, from, and *νύμφη*, a bride.] *In archaiology.* The Greeks gave this name to those who conducted the newly married bride to her husband. The Latin term for this purpose was *pronubi*, or *pronubæ*. The commencement of the ceremony consisted in enclosing the vestments of the espoused in a wicker basket called by Festus *cumerum*. The bearer of this basket was followed by several females holding in their hands a distaff with flax, which they placed upon a spindle. The parents and friends of the spouse walked next, followed by three boys clad in white robes bordered with purple. These were termed *patrimi*, *matrimi*, *paranymphi:* one of the boys bore a lighted flambeau or torch made of a branch of hawthorn, because, according to Festus and Varro, this sort of wood was held to typify benevolence, and also to disperse enchantments.

PARAPET. [*parapetto*, Ital. breastwork.] *In architecture.* A small wall constructed either of masonry or earth, serving for the support or railing to a quay, a bridge, a terrace, &c.

PARAPETESMATA. [*παραπέτασμα*, a covering, Gr.] *In archaiology.* In the interior of their houses the ancients had scarcely any doors: they suspended only the carpet or covering called *παραπέτασμα*, more or less rich, before the opening which conducted from one apartment into another. This is the reason why, upon antique monuments, we find sometimes tapestry or drapery depicted to indicate the interior of a chamber. In the palaces of their sovereigns and other great men, there were *valarii*, that is to say, officers appointed to the charge and guardianship of these openings, otherwise so slightly secured. It appears that this same term was likewise applied to designate the veil spread over the theatres to place the spectators in the shade.

PARASCENE. [*παρὰ*, from or behind, and *σκήνη*, a scene, Gr.] *In archaiology.* The *parascenium*, among the Romans, signified a place at the back part of the theatre, to which the actors retired for the purpose of robing and disrobing themselves, &c. It was still more frequently denominated the *postscenium*, and answered probably both to the green-room and dressing-rooms of the modern stage. It will be recollected that the Greek and Roman theatrical performers were all men and boys.

PARASITE. [*παράσειτος*, one who flatters

for the sake of gain, from παρὰ, at, and σῖτος, provisions.] The original meaning of this Greek word was a certain officer who was appointed to take charge of the first fruits offered to the deities of the ancients, and which principally consisted of wheat and barley. The Romans borrowed this custom, as they did most others, of the Greeks, denominating their officers for a similar purpose *epulones*. It is difficult to ascertain the precise period at which the appointment fell into disrepute; but be that as it may, the term parasite, in process of time, acquired a signification of a very contemptible kind, denoting a kind of *toadeater* to the rich and great, or, in the words of our derivation, one who flatters for the sake of gain.

PARASOL. [παρὰ, at, Gr. and *sol*, the sun, Lat. i. e. opposed to the sun, ut opinor.] *In archaiology*. It would appear from ancient monuments and descriptions that the well known instrument thus called, or something exceedingly resembling it, was greatly used among the ancients, not for the purpose so much of preservation from the rays of the sun, as in religious ceremonies and processions. Athenæus, in his description of the fête solemnized at Alexandria by Ptolemy Philadelphus, states that they paraded a large car, drawn by a hundred and eighty men, on which was placed a statue of Bacchus, magnificently adorned, ten cubits high, and shaded by a parasol. This instrument is observed on a multiplicity of ancient monuments. The 41st plate of the *Admiranda Romæ Monumenta* presents a *basso rilievo* representing the triumphal pomp of Bacchus and Ariadne, whereon a parasol is remarked above the figure of the former.

In the fêtes of Ceres and Minerva, the young females who celebrated them bore, among other sacred instruments, the parasol. It was, in fact, one of the most ancient marks of dignity that we find indicated either by relics of art or by authors. In the *Travels* of CHARDIN and of BRUYN, we find several *bassi rilievi* of Persepolis, whereon the king or one of the principal magistrates is represented surrounded with slaves, among which are two young females, one of whom holds a parasol, and the other chases flies with an instrument somewhat resembling a horse's tail.

At the head of the dissertation of Paciaudi, entitled, *De Umbellæ Gestatione*, is engraved a vase from the Museum of M. Felix Mastrilli, of Nola. The figures observed on this monument recall the usage of baths, where parasols were also employed. On that half of the vase which is occupied by the lower part of the engraving is the bather, bearing a parasol, with bracelets on his arms, and directing his steps towards a sort of small table, of which it was customary to have several in the baths, either to put their clothes on, or the vases which contained oil and other essences serving to anoint themselves withal, or to rub themselves with afterwards. (See BATH.) From a rather prudish principle, Paciaudi has given in the engraving a cincture to the bather which he is destitute of in the original vase.

In process of time, when the Romans began to throw aside the simple and austere habits of their forefathers, the parasol, by a very natural transition, began to acquire the purpose to which it is still applied. The matrons, particularly, used to be followed, in their perambulations, by a slave whose office was to protect the delicacy of their charms by intercepting between them and the solar heat the agreeable shade of the parasol.

With respect to the form of this article among the ancients, sufficient is to be learnt from those figures which the researches of Paciaudi (above referred to), and other authors have afforded us. They were constructed of wands or twigs disposed in such a manner as to admit of their being put up or down in much the same way as those used at the present day. As to the substance employed, it was often of rich stuff, such as silk, &c. of showy colours, and elegantly embroidered.

PARASTATÆ. See PILASTER, ANTA.

PARAZONIUM. [παρὰ, at, and ζώνη, the girdle or waist, Gr.] *In archaiology*. Such is the term which antiquaries have applied to a warlike instrument which was, properly speaking, the Greek sword. The most ancient form of this weapon is to be found represented on antique Grecian vases. The blade is very short, thickest in the middle, and has somewhat the appearance of a spear-head. Orestes, upon a vase of Lord Hamilton's published by Tischbein (tom. 3, pl. 32), holds a parazonium, as he does also on the painting on another Greek vase published by Millin in the 1st vol. and 29th pl. of his *Monumens Antiques Inédits*.

PARCÆ. [Lat. according to Varro from *partus*, birth: others, however, derive it from *partior*, to divide.] *In mythological painting and sculpture*. The heathens of old supposed every thing to be fixed, not only the happy but the unfortunate events in life. These eternal decrees of what every one was to do or suffer were represented by orders written on tablets

of brass kept by the Parcæ or Destinies: one of whom, and sometimes all three, were supposed to spin out the thread of life chequered unequally with two colours, with more of white or more of black, according as each man was to have a greater share of happiness or unhappiness. This notion was borrowed, like so many others, from the Greeks by the Romans, though it was capable of undermining all the virtues, and particularly their great favourite, industry. Probably there was no personal representation of Fate among the Romans, but it seems with them to have included every thing spoken by Jupiter. If this be admitted, *Fate* will signify only the words or decrees of that supreme deity, and the Parcæ or Destinies the agents for putting them in execution.

Thus *Necessity* is (though Fate was not) represented as a person. In a statue in Montfaucon, she holds in her right hand a *clavis trabalis*, or one of those vast nails or pins that fastened the beams of brass in the strongest buildings. This (with her other attributes mentioned by Horace), was used as emblematic of firmness and stability.

The three Destinies (as we have said) were deemed the dispensers of the eternal decrees of Jupiter, and were supposed to spin the party-coloured thread of each man's life. They are represented on a medal of Dioclesian each with a distaff in her hand, and their names are Clotho, Lachesis, and Atropos.

The figures of these goddesses are very uncommon. The best written description of them is in Catullus, and may itself be styled a perfect picture. They are extremely old, and dressed in long robes.

PARCHMENT. [*parchemin*, Fr. *pergamena*, Lat. from Πέργαμος, Troy, in which city it is said to have been first invented.] *In drawing*, &c. The skins of sheep or goats prepared after such a manner as to render it proper for writing or drawing upon. It is said to have been the invention of Eumenes, king of Pergamos, but is probably of still remoter origin: for the Persians of old, according to Diodorus, wrote their verses, &c. on skins; and Herodotus, the father of history, states, that the ancient Ionians made use of goat and sheepskins in writing and drawing figures long before the age of the prince alluded to. He perhaps improved its quality and manufacture.

Parchment is still used in the fine arts for purposes of drawing, but *vellum* makes a much preferable substitute (see VELLUM).

PARERGA. [παρὰ, beyond, and ἔργον, work, Gr.] *In architecture, painting*, &c. This word is sometimes made use of in architecture to signify the supplements or additions made to the principal work to which they are appended by way of ornament. In *painting* it denotes those *petits morceaux*, or compartments placed upon the sides or in the angles of the main picture. It is likewise occasionally used to specify vignettes, flower pieces, &c. with which a book is adorned.

PARIAN CHRONICLE. See ARUNDELIAN MARBLES.

PARIAN MARBLE. *In statuary.* We have already, under the head MARBLE (which word see), made mention of this celebrated variety; and shall merely say a few words here which seem called for by the mistakes so commonly made with regard to it. It has been over and over again confounded, not only with CARRARA MARBLE (which refer to), but with alabaster (see ALABASTER); notwithstanding it altogether differs in *nature* from the latter substance, and in *character* from the former. Carrara marble is of a finer structure and clearer white than the Parian; but, at the same time, less bright and splendid, harder to cut, and not capable of so glittering a polish. The true Parian marble has generally somewhat of a faint bluish tinge among the white, and often has blue veins in different parts of it.

PARK. [*parc*, Fr. paṗk, Saxon.] The meaning of this word, as originally applied in our language, is a large forest enclosed and stored with beasts of chase, &c. which a man may possess either by prescription or the grant of the sovereign. These are usually royal demesnes.

In its more general acceptation, however, the term *park* implies a considerable extent of ground enclosed with walls or palisades, and attached to the residence of some individual of rank, except in those instances wherein it is laid open for the recreation and healthy exercise of the public.

In their villas the ancient Romans were fond of possessing capabilities for enjoying the pleasures of the chase; to which they were greatly addicted, among other reasons, from the excellent effect produced by robust and manly exercise upon their bodies, and through that medium upon their minds likewise. For this purpose, then, parks were generally attached to their country houses. We find one represented in a painting on the cieling of the tomb of the Pisones, near the Flaminian way. Originally hares constituted the only game placed therein, and hence they

were denominated *leporaria* (from *lepus*, a hare). At length, however, other game were introduced—such as stags, wild boars, wild goats, roebucks, &c., and the extent of the enclosures was proportionably enlarged. Fulvius Lupinus was one of the first Romans who greatly increased his domain in this way; his park stretched over forty acres. Pompey and Hortensius followed this example, the latter establishing a park of upwards of fifty acres.

Mr. Loudon, in his *Treatise on Country Residences*, observes, that parks should be of two descriptions; those attached to small houses, wherein regard should chiefly be directed to the value of the pasture, and where the pasturing animals are sheep, horses, oxen, &c.; and secondly, such as, belonging to splendid mansions, demand more especially grandeur of character and distribution.

In the former species, the surface of the ground should receive its principal characteristic from groups of trees, or gentle walks, conducting the promenader from vista to vista, so as to produce as great a variety of effects as the nature of the scenery around and the contracted space the artist has to work in will possibly admit. Indeed, by circuitous paths, and skilful disposition of trees, this kind of park will often deceive the eye of the spectator with respect to its actual extent. A level and monotonous surface, such as we frequently are compelled to notice, containing *a walk round*, and dotted with sophisticated-looking clumps, at regular distances, can, it will be obvious, never appear larger than it really is; but a very few acres, laid out in the manner hinted at by us above, may even be made to appear almost boundless; every step presenting a novel combination, arising from the judiciously planted masses of trees, and the sight of the cattle caught by the eye at different points through the intermediate foliage.

In the latter description of park another principle must be proposed and followed. Here that style of distribution and planting denominated the *forest* style is in place. Long avenues; open glades stretching out in ample proportions; broken ground, set with trees, shrubs, underwood, furze, fern, &c. is admissible, and indeed desirable. The grazing animals, in a domain of this order, should be deer or horses, intermixed with a few wild cattle. It has been suggested that, as parks form the prominent features of many capital residences, were the appearance of wildness and forest scenery just alluded to given to them, the effect would be most grand and imposing, not only as regarded the actual domain of which they formed a part, but viewed with reference to the whole surrounding country.

As it is, the seats of our principal men of rank and fortune possess many very noble specimens of enclosures of this kind —among which we will enumerate, by the way, those of Blenheim, Knole, Stowe, Donnington, Bow Wood, &c. &c.

Among the royal demesnes, Windsor Park stands proudly preeminent, and is, indeed, one of the noblest in Europe, and every way worthy to encircle the castle of an English monarch.

In the metropolis there are several attached to the crown, but which are become by prescription almost the common property of the nation, contributing inestimably, not merely to the amusement and relaxation, but to the health and comfort of the immense population of the capital. These are—Hyde Park, St. James's Park, and the Green Park; and to these has within a few years been most munificently added—the Marylebone, or, as it was at first denominated, the *Regent's* Park, which skirts the western extremity of the town. On the three well known enclosures first mentioned, we deem it quite unnecessary to enlarge at all: but since the last is comparatively little known, especially to such of our readers as live in the country, and as it assumes a new character (and one very interesting viewed in relation to the fine arts), from its princely architectural embellishments, we shall extract, from an admirable little publication before alluded to (see LANDSCAPE GARDENING), called the *Literary Pocket Book* (for 1823), the following well written and succinct description:

"When we first saw that the Marylebone Fields were enclosed, and that the hedge-row walks which twined through them were gradually being obliterated, and the whole district artificially laid out (there is nothing more wretched than the first process of planting and making roads), we underwent a painful feeling or two, and heartily deplored the destructive advances of what generally goes by the name of improvement. Old recollections—recollections of youth, upon which we love to dwell as we advance into the shadowed part of our life's road, are remorselessly stricken aside by this change in pleasant localities; we almost mourn over the loss of the old trees and paths which stood as quiet mementos of the cheerful rambles of our boyish days, or, it may be, of love-hal-

lowed walks and looks, and tender words first ventured under the influence of the fields and the comparative retirement. Nothing makes the lover bold and the mistress tender so well as the fresh and fragrant air, the green herbage, the quiet and the privacy of country spots, which, when near towns, are more exciting by the contrast.

"A few years, however, have elapsed, and we are not only reconciled to the change alluded to, but rejoice in it. A noble park is rapidly *rising up*, if we may use such an expression, and a vast space, close by the metropolis, not only preserved from the encroachment of mean buildings, but laid out with groves, lakes, and villas, with their separate pleasure grounds, while through the whole place there is a winding road, which commands at every turn some fresh features of an extensive country prospect.

"This is indeed a desirable appendage to so vast a town as London, more especially as the rage for building fills every pleasant outlet with bricks, mortar, rubbish, and eternal scaffold-poles, which, whether you walk East, West, North, or South, seem to be running after you. We heard a gentleman say, the other day, that he was sure a resident of the suburbs could scarcely lie down after dinner, and take a nap, without finding, when he awoke, that a new row of buildings had started up since he closed his eyes. It is certainly astonishing: one would think the builders used magic, or steam at least, and it would be curious to ask those gentlemen in what part of the neighbouring counties they intend London should end. Not content with separate streets, squares, and rows, they are actually the founders of new towns, which in the space of a few months become finished and inhabited. The precincts of London have more the appearance of a newly discovered colony than the suburbs of an ancient city.

"For instance: In what a very short time back were the Bayswater Fields, there is now a populous district, called by the inhabitants 'Moscow;' and at the foot of Primrose Hill we are amazed by coming upon a large complication of streets, &c. under the name of 'Portland Town.' The rustic and primeval meadows of Kilburn are also filling with raw buildings and incipient roads; to say nothing of the charming neighbourhood of St. John's Wood Farm, and other spots nearer town. 'The artificial causes of the extension of the town,' says Mr. Nash, in one of his Reports to the Commissioners of his Majesty's Woods, &c. 'are the speculations of builders, encouraged and promoted by merchants dealing in the materials of building, and attorneys with monied clients facilitating, and indeed putting in motion, the whole system, by disposing of their clients' money in premature mortgages, the sale of improved ground-rents, and by numerous other devices, by which their clients make an advantageous use of their money, and the attorneys create to themselves a lucrative business from the agreements, assignments, leases, mortgages, bonds, and other instruments of law, which become necessary throughout such complicated and intricate transactions. It is not necessary for the present purpose to enumerate the bad consequences and pernicious effects which arise from such an unnatural and forced enlargement of the town, further than to observe, that it is the interest of those concerned in such buildings that they should be of as little cost as possible, preserving an attractive exterior which Parker's stucco, coloured bricks, and balconies accomplish; and a fashionable arrangement of rooms on the principal floors, embellished by the paper hanger and a few flimsy marble chimneypieces, are the attractions of the interior. These are sufficient allurements to the public, and ensure the sale of the houses, which is the ultimate object of the builders; and to this finery every thing out of sight is sacrificed, or is no further an object of attention, than that no defects in the constructive and substantial parts shall make their appearance while the houses are on sale; and, it is to be feared, that, for want of those essentials which constitute the strength and permanency of houses, a very few years will exhibit cracked walls, swagged floors, bulged fronts, crooked roofs, leaky gutters, inadequate drains, and other ills of an originally bad constitution; and, it is quite certain, without a renovation equal to rebuilding, that all those houses, long, very long, before the expiration of the leases, will cease to exist, and the reversionary estate the proprietors look for will never be realized, as it is not till the end of the builder's term that the proprietor of the fee will be entitled to the additional ground-rents laid on by the builder. It is evidently, therefore, not the interest of the crown that Marylebone Park should be covered with buildings of that description.'

"The noble appropriation of the district of which we are now speaking is not so much a change as a restoration. It was formerly a park, and had a royal palace

in it, where, we believe, Queen Elizabeth occasionally resided. It was disparked by Oliver Cromwell, who settled it on Colonel Thomas Harrison's regiment of dragoons for their pay; but, at the restoration of Charles II. it passed into the hands of other possessors, from which time it has descended through different proprietors, till, at length, it has reverted to the crown, by whose public spirit a magnificent park is secured to the inhabitants of London. The expense of its planting, &c. must have been enormous, but money cannot be better laid out than on purposes of this lasting benefit and national ornament.

"The plan and size of the park is in every respect worthy of the nation. It is larger than Hyde Park, St. James's, and the Green Park together; and the trees planted in it about ten years ago are already becoming umbrageous. The water is very extensive. As you are rowed on it, the variety of views you come upon is admirable: sometimes you are in a narrow stream, closely overhung by the branches of trees; presently you open upon a wide sheet of water, like a lake, with swans sunning themselves on its bosom; by and by your boat floats near the edge of a smooth lawn fronting one of the villas; and then again you catch the perspective of a range of superb edifices, the elevation of which is contrived to have the effect of one palace. The park, in fact, is to be belted with groups of these mansions, entirely excluding all sight of the streets. Some of them are finished; and give a satisfactory earnest of the splendid spirit in which the whole is to be accomplished. There will be nothing like it in Europe. The villas in the interior of the park are planted out from the view of each other, so that the inhabitant of each seems, in his prospect, to be the sole lord of the surrounding picturesque scenery.

"In the centre of the park there is a circular plantation of immense circumference, and in the interior of this you are in a perfect Arcadia. The mind cannot conceive any thing more hushed, more sylvan, more entirely removed from the slightest evidence of proximity to a town. Nothing is audible there except the songs of birds and the rustling of leaves. Kensington Gardens, beautiful as they are, have no seclusion so perfect as this.

"We cannot recommend a better thing to such of our readers as have leisure, than a day spent in wandering amidst the union of stately objects and rural beauty which constitute the charm of Marylebone Park."

PARMA. [a Thracian word, signifying *round or circular.*] *In ancient costume.* According to Polybius and Titus Livius, this was a little thick shield or buckler, circular, as its name imports, and about three feet in diameter. It was used by the light cavalry of the ancients. A soldier appears on the Trajan column armed with the *parma* or *parmula*, which covers his body from the neck to the knees.

PARQUETRY. [*parqueterie*, Fr.] *In the art of carving and modelling.* A species of joinery or cabinet work, which consists in making a *parquet*, or inlaid floor, composed of small pieces of wood, either square or triangular, which, by the manner of their disposition, are capable of forming various combinations of figures. Two sorts of wood are employed for this purpose almost of the same colour, or differing only in shade, and these two sorts suffice for the production of a great variety of effects. The curious in this matter may consult *Mémoires sur les Combinaisons*, by R. P. Truchet, inserted in the *Mémoires pour l'Académie Royale des Sciences* for the year 1704.

PARRICIDE. [*parens*, a parent, and *cedo*, to kill, Lat.] *In archaiology.* Pausanias says that, in the infernal regions, the penalty of the crime of parricide will be, for the culprit to have his own father for his tormentor, by whom he shall be strangled; and it was after this fancy that Polygnotus, the Greek painter, represented the punishment of an unnatural son who had maltreated his father.

PARTERRE. [Fr.] *In decoration of ground.* A level division of ground that is laid out with shrubs and flowers. These kind of works have been much more practised than they now are, although they may be made to impress the spectator very agreeably, and to afford, by their graceful combinations of flowers (which are among the sweetest things in nature), an ornamental and elegant effect.

Parterres are commonly constructed either oblong or of a long square, and their situation is generally in front of a house, sometimes stretching along its entire width.

PARTHENON. [Πάρθενος, a virgin, Gr.] *In ancient architecture.* Such is the appellation given to the celebrated Grecian temple of Minerva, who was often herself designated Πάρθενος, or *virgin*, and worshipped with the most profound adoration in the citadel of Athens. The temple thus called was built during the splendid era of Pericles, that name so deservedly dear to the lover of the fine arts. The expenses

of its erection were estimated at six thousand talents. It was built upon a spot elevated on all sides above the town and citadel; of the Doric order; constructed of Pentelican marble; and from its breadth (one hundred Greek feet) was denominated by the ancients *Hecatompedon.*

The Parthenon was two hundred and twenty Greek feet in length, and about sixty-nine in height. Its portico was double at the two fronts, and single at the sides. On the exterior façade of the nave was represented a procession in honour of Minerva. The two architects employed by Pericles in the building of this superb and elegant edifice were Callicrates and Ictinus.

This magnificent temple had resisted all the outrages of time; had been in turn converted into a Christian church and a Turkish mosque; but still subsisted entire when Spon and Wheeler visited Attica in 1676. It was in the year 1687 that the Venetians besieged the citadel of Athens under the command of General Kœnigsmarck. A bomb fell most unluckily on the devoted Parthenon, set fire to the powder which the Turks had shut up therein, and thus the roof was entirely destroyed, and the whole building almost reduced to ruin. The Venetian general, being afterwards desirous of carrying off the statue of Minerva which had adorned the pediment, had it removed, thereby assisting in the defacement of the place without any good result to himself—for the group fell to the ground and was shattered to pieces. Since this period every man of taste must have deplored the demolition of this noble structure, and the enlightened travellers who have visited the spot have successively published engravings of its remains. One of the first of these was Le Roy, in his *Ruins of Greece;* after him came Stuart, who, possessing greater pecuniary means, surpassed his predecessor in producing a beautiful and interesting work on the Athenian Antiquities. Chandler, and other travellers in Greece, have also described what came under their eye of the remains of the Parthenon, of which many models have likewise been executed. M. Cassas (says Millin) has a very fine one in his valuable cabinet of models of antique temples and other monuments. There is another in the *Galerie d'Architecture au Palais des Arts,* at Paris, &c. &c.

But, not content with these artistical labours and publications, more recent travellers have enriched their country and themselves with the actual spoils of the Parthenon. The foremost of these is our fellow-countryman, Lord Elgin, who, about the year 1800, removed a variety of the matchless friezes, statues, &c. which were purchased of him by Parliament on the part of the nation, and now form the most valuable and interesting portion of the British Museum. (See Elgin Marbles.) A part of his lordship's precious treasure was, however, to the regret of all lovers of the fine arts, lost in the passage to England.

After the comprehensive works of Le Roy and Stuart, it should seem that little remained to be published with respect to the ruins of the Parthenon. Nevertheless, Millin appears to be of opinion, that there are sufficient materials in the Royal Library of Paris to furnish forth a new work; and he mentions a series of designs on the subject (comprising all the bassi rilievi, and, more especially, a great part of the pediment), which are preserved in the Cabinet of Engravings, and which had been made by a Flemish artist at the instance of M. Ollier, of Nointel, who was ambassador from France to the Porte in the year 1670, and consequently when the building was yet perfect.

Parthians. *In archaiology.* A people of Asia, famous in antiquity, and who deserve notice here on account of the perception they seem to have possessed of the taste and greatness of the Greeks, whose manners and habits they constantly emulated. Arsaces, a Parthian king, and chief of the dynasty of the Arsacides, appears on many medals, beardless like the Greeks, and wearing a mitre of simple construction surrounded by a diadem. Some of these medals are very beautifully executed; indeed, it is probable that the coins of the Parthian kings, some of which bear Grecian inscriptions, were the actual workmanship of Greek artists.

Partition. [Lat. *partior,* to divide.] *In architecture.* That which divides or separates one room or apartment from another.

Pasquin. [*pasquino,* Italian.] *In sculpture.* By this name is designated a group, or rather a *torso,* in white marble, now in a corner of the Ursini palace at Rome, and which has been regarded by some as the figure of a wrestler, by others as that of Mars, or some earthly warrior, by others again as a gladiator, &c. M. de Ramdohr, in considering the merits of this relic of ancient art, observes that its very mutilated state prevents the connoisseur from arriv-

ing at any satisfactory conclusion respecting them. He himself seems to be of opinion that it is the representation of a warrior carrying from the scene of battle his wounded comrade.

The history of this sculpture is remarkable enough. It derives its present name from an Italian cobbler, so called, who lived at Rome, and was notorious for the bitterness of his gibes and the raciness of his jokes. His shop became, consequently, the rendezvous for a quantity of splenetic and idle persons, who diverted *themselves* at least, by bantering all the passers by.

After Pasquin's decease, in digging the pavement up in front of his shop, or stall, the fragments of a statue were exhumed, well chiseled; but, as has been already observed, maimed and half spoiled.

To this statue, by common consent, was affixed the name of the jocular cobbler, in the neighbourhood of whose nest it was discovered and immediately set up on the same spot; and from that time and circumstance arose the well known term of *pasquinade*, all lampoons and satires having been, at Rome, ascribed to this figure, being put in its mouth or pasted against it as if the *bona fide* lucubrations of *Pasquin redivivus*. The usual method is, to make Pasquin address himself to Marforio (another statue in the same town) or the latter to Pasquin, who never fails to make reply, the one being often made to assist the other, when either is assailed. These satirical libels are commonly brief; this, one should imagine, is a matter not very difficult to hit. They also constantly aim at being *piquant;* but here the result is by no means so certain or uniform.

Millin speaks of two other groups at Florence which bear a striking resemblance to the Pasquin:—they are of Menelaus carrying off the dead body of Patroclus; one at the Pitti Palace, the other upon the *Ponte Vecchio.*

PASSAGE. [Fr. from *passus*, a step, Lat.] *In architecture.* A pathway both connecting and dividing the different rooms in a house, or an avenue leading from one street into another. A small corridor.

PASSE-PARTOUT. [Fr.] *In engraving.* A piece of wood or of metal upon which is engraved some ornamental design, by way of border, the midle of the plate being cut out to leave room for another piece to which it serves as a kind of frame.

PASSIONS. [Fr. from *patior*, Lat. to suffer.] *In painting, sculpture,* &c. The word used by the Greeks in this sense was πάθος, and in its original import it denoted every *feeling* of the mind occasioned by an extrinsic cause; but its more general acceptation signifies some *agitation* of mind opposed to that state of tranquillity in which a man is most master of himself, and that it was thus used by the Greeks and Romans becomes manifest from Cicero's rendering πάθος *perturbatio.*

The language of the passions is that which, above all other things, it behoves the painter to understand. Without it the finest works in other respects must often appear "stale, flat, and unprofitable." It does not suffice that a painter should be able to delineate the most exquisite forms, to give them the most graceful attitudes, or, in addition, to group them well together. Drawing, colouring, composition, either singly or unitedly, are of little avail if the countenances of the figures be not lighted up by the fire of expression. The artist must learn how to clothe the personages of his scene with grief, with joy, with fear, with anger: he must, as it were, write on their faces what they think and what they feel; for it is in this department that painting soars her highest flight, and *suggests* to the imagination of the spectator much more than she *expresses.*

Every thing which is the source of passion to the mind soon communicates to the countenance a characteristic appearance, this appearance relating to the alteration of the muscles, which enlarge or contract, become irritated or relaxed, in proportion to the quantity of animal excitement. If Lionardo da Vinci's advice be taken, the best masters a painter can have recourse to in this branch are those dumb men who have found out the method of expressing their sentiments by the motion of their hands, eyes, eyebrows, and, in short, every other part of the body. In adopting this advice, however, care should be taken to avoid gestures too strong and exaggerated, which those unfortunate individuals, from destitution of the organ of speech, would in all probability display.

Almost every student is, it is presumed, acquainted more or less with the celebrated work of the French painter, Le Brun, on the Passions. From this something may indisputably be learned; but the study of it is subject to the same restraint and objection as that course recommended by the illustrious old master mentioned above. Le Brun, also, is given to exaggeration; a circumstance which has called forth the following observations from Winckelmann. "Expression, though

precarious in its nature, has been reduced into a system, in a Treatise on the Passions, by Chas. Le Brun, a work generally put into the hands of young artists. The plates accompanying this treatise do not only give to the face the affections of the soul in too high a tone, but there are many of the heads in which the passions are represented in a manner quite outrageous. He appears to give instructions in *expression* as Diogenes gave lessons of morality. 'I act like a musician (said that cynic), who gives a high tone in order to indicate a true one.' But the fervour of youth requires to be repressed rather than stimulated; and hence it is difficult for the young artist copying after Le Brun to seize *the true tone.*"

M. Millin divides the various passions into four species, which he designates the *tranquil* passions, the *agreeable*, the *sorrowful*, and the *violent* or *terrible*. In the first kind (says he), which are formed by quiescent impressions, the different parts of the face rest in their natural situation, and undergo no alterations; each announcing the state of peace in which the mind reposes. (But if this be *passion*, logically considered, it certainly is not so in the understood acceptation of the term). It is in the eyes (proceeds he), and more particularly still in the eyebrows, and their various movements, that the passions exhibit themselves most forcibly. That movement by which the eyebrows are gently elevated expresses the second class of passions—the agreeable ones: that by which they are forcibly depressed the latter class—or violent ones. Again, it has been observed, that in fits of anger the face reddens, the muscles of the lips puff out, the eyes sparkle; and that, on the contrary, in fits of melancholy, the eyes grow motionless and dead, the face becomes pale, and the lips sink in. The different expressions of laughing and weeping are well defined by Le Brun. "The movements of laughter are expressed by the eyebrows elevated towards the middle of the eye, and lowered towards the sides of the nose: the eyes, almost shut, appear sometimes as if moistened with tears: the mouth, a little open, allows the teeth to be perceived: the extremities of the mouth being drawn back, a dimple is occasioned in the cheeks, which appear to be swelled: the nostrils are open; and the face becomes flushed.—The changes which weeping occasions are equally visible. The eyebrow is lowered on the middle of the forehead; the eyes are almost shut, moistened and lowered towards the sides of the cheeks; the nostrils are swelled, and the veins of the forehead very apparent: the mouth shut, by the lowness of its sides, occasions wrinkles in the cheeks: the under lip is turned down, and presses at the same time the upper lip: the whole countenance is wrinkled, and becomes red, especially the eyebrows, the eyes, the nose, and the cheeks."

It will appear from the above extract, that the two operations of laughing and crying, however opposite in their nature, nevertheless act upon the muscles of the face in much the same manner. Pietro da Cortona was one day finishing the face of a crying child in the representation of the *iron age*, with which he was adorning the floor called the *hot bath* in the royal Pitti palace. Ferdinand II. chancing to be, for amusement's sake, looking on, could not withhold his admiration, and cried out—"Oh, how well that child cries!" To which the painter replied—"Has your highness any desire to see how easy it is to make children laugh?"—on which, taking up his pencil, by giving the contour of the mouth a concave turn downwards instead of the convex upwards, which it had before, and with little or no alteration in any other part of the face, he made the child, who a minute before seemed ready to burst its heart with crying, appear equally in danger of bursting its sides with immoderate laughter; after which, by restoring the altered features to their former position, the infant's crying paroxysm returned *instanter*.

Other writers have given instructions respecting the expression of the passions; but all whom we have consulted make so many divisions and subdivisions of them, that a philosopher can scarcely follow them in metaphysical theory, much less a painter embody their effects on canvass. Nature, therefore, nature must be the student's best guide, more particularly in treating those very minute and almost imperceptible differences by which, nevertheless, things decidedly opposite to each other are sometimes expressed.

The artist will also reap considerable benefit from studying the fine ancient heads; such as those of Mithridates, Seneca, Alexander dying, Cleopatra, Niobe, &c.: but, above all, let him endeavour fully to comprehend—to *feel*—the kind of emotion which he is about to express; whether by calling up mentally the image of an absent person or thing, or by being affected with the lively idea of a situation

he has before himself experienced, or witnessed another experience. He should bear in mind, likewise, that all the terrible or agreeable, the violent or slight movements, are to be treated in a natural manner, and bear relation to the age and condition, sex and dignity, of the person represented. Those gradations which art varies according to the nature of the situtiun and the characters of men compose the principal ingredients of discernment, knowledge, and taste. They have been the objects of attention and inquiry to the most eminent painters of every age, and were of the greatest importance in assisting them to arrive at that degree of excellence to which they have carried expression.

PASTAS. [πασὰς, Gr. a bed of flowers—a nuptial couch—from πασσω, to sprinkle.] *In archaiology.* Name of one of the vestibules of the GYNÆCEIUM (which word see). The term has also been applied to an embroidered carpet suspended before the entrances into the chambers of ancient houses.

PASTE. [*pâte*, Fr.] A sort of preparation in glass made to imitate gems. The Egyptians are said, from the most remote antiquity, to have practised this deceit. Sidonia, a Phœnician town, was very famous for this kind of work, and they called these imitated or factitious stones *gemmæ vitriæ*. Pliny makes mention of them in his *Natural History*, and Seneca in his ninetieth letter. The former enumerates the marks by which a real stone or gem might be distinguished from a mock one. There yet remain several very beautiful specimens of these ancient forgeries in glass, denominated antique paste. They are often found in sepulchres, with Grecian, improperly designated Etruscan vases: their colours are blue, green, white, and gray. A Milanese painter, Franc. Viccecomite, restored this department of art towards the close of the fifteenth century. Matthæus, however, in his work *De Inventoribus*, attributes it to a certain artist of the name of Angelus Barroellus. Alb. Neri and Kunkel, having discovered the secret of giving to glass the identical shades of colour of gems, have brought the invention to the greatest perfection. With the former originated the employment of the word paste in this sense. Homberg has published the process of making factitious jewels in a treatise entitled, *Manner of Copying upon Glass engraved Gems.* This treatise was inserted in *Mémoires de l'Académie des Sciences* for 1712. In the preface to the treatise of Vettori *De Septem Dormientibus*, Rome, 1741, we find some instructions on the method of making pastes, with a catalogue of the artists in that way. In the first volume of the treatise *Des Pierres gravées* of Mariette, Paris, 1750, similar strictures on the factitious stones, and the manner of making them, are to be found at page 209. Clachant, Delin, Reifenstein, Lippert, and Tassie are amongst the most successful recent practisers of this species of art.

These imitations are no way inferior to the native stones (when carefully made and well polished), either in transparence or brightness, but they are not equal in hardness. Calcined crystal, lead, and metallic preparations are the ingredients of their composition. The colours may be rendered deeper or lighter according to the particular purpose for which the counterfeit stone is designed; and it may be remarked, as a general rule, that small stones for rings, &c. require a deeper hue, and large ones a paler. Verdigris, zaffer, and manganese are the usual colouring substances. Other very beautiful tints, however, may be produced from different ingredients: exquisite red, for instance, may be obtained from gold, and one not much inferior from iron: a sky colour from silver, and a fine green from copper or brass. The gems themselves, likewise, furnish brilliant colours resembling their own.

PASTEL. [Lat. *pastillus*, dim.] *In painting.* Name given to a certain plant from which is extracted a beautiful blue colour, which might perhaps be rendered equal to indigo. Its true botanical appellation is *isatis tinctoria.*

This name, or pastil, is also used for a kind of paste, composed of several colours, and ground up with gum water, either together or separately, in order to make crayons to paint with on paper or parchment. See CRAYON. This kind of painting possesses some advantages over the modes more commonly practised; but, unfortunately, its want of durability counterbalances those qualities for which it might otherwise be desirable.

PASTICCIO. [Italian.] *In painting.* Name given to a peculiar species of paintings which cannot properly be designated either originals or copies of other pictures, but rather direct copies of some master's general style. David Teniers, the younger, possessed the faculty of imitating exactly many of the best masters of Italy and Flanders. He has produced *pasticcios*

which have been mistaken for original pictures of Rubens. After this artist, Luca Giordano, the Neapolitan, was one of the greatest of pasticcio painters. In order to detect this kind of forgery in the art, the application of those rules may be serviceable which we inserted on the subject towards the conclusion of our article on PAINTING.

PASTOPHORES. [Gr. παστὸς, a couch, and φέρω, to bring or bear.] *In archaiology.* Priests of an inferior order among the Egyptians, who, in solemn religious processions, carried the statues of the gods. Schmidt infers hence that care should be taken not to confound them with those priests who were appointed to take charge of other objects consecrated to religious purposes. It is known that the Egyptians sometimes placed upon carts or chariots, but still more frequently in ships, the images of their principal deities; and accordingly Pocock speaks of two antique monuments extracted from the ruins of Thebes, on one of which are represented twelve pastophores, carrying on their shoulders a vessel, in the middle of which was a little chapel, closed:—on the other antique, eight priests of a similar order bore, in like manner, a ship wherein a god, in human guise, appeared seated upon a kind of shrine. It is to be regretted that this traveller only cites from memory, having neglected to procure a drawing of the figures.

Sometimes, also, these *pastophores* bore in their hands the images of the gods. Caylus (*Recueil d'Antiquit.* l. vi. pl. 13), has presented a drawing of a priest bearing the idol of a divinity enclosed in a sort of little tabernacle.

Some antiquaries have affirmed that the name of *pastophores* was applied to these theological persons by the Greeks from the circumstance of their wearing long mantles, or more specifically still from the couch or bed (παστὸς) of Venus, which was carried by them in certain ceremonies, or, again, from the veil which covered the divinities, and which was occasionally lifted up by the pastophores, to exhibit them to the view of the people.

PASTOR. [Lat. a shepherd, from *pasco*, to feed.] *In emblematical painting and sculpture.* The *good pastor* is the name given to an allegorical figure bearing a lamb upon his shoulders. The primitive Christians, above all, were in the habit of thus typifying the holy Founder of their religion. This representation of the good pastor, or shepherd, bringing back in his arms his wandering sheep, is received as symbolical of the redemption and resurrection. Buonarroti, in his *Osservazioni sopra Frammenti di Vasi di Vetro*, has given several instances of this kind in pl. 1, No. 3, pl. 4 and pl. 5, No. 1. The good pastor was generally clothed with a tucked-up tunic, and sometimes bore a wand or the *pedum*.

PATAICK. [Gr. παταίκος, from a Phœnician word, originally signifying the image of their gods painted on the sterns of their vessels.] *In archaiology.* Herodotus is the only author who speaks of these little images, which he likens to pigmies. He, however, does not certainly give them the name of divinities, and hence Larcher and other writers on archaiology have speculated that they were merely figures of an indifferent or arbitrary nature, probably of brute animals, which served to give name to the vessel. On the other hand, Stanley is of opinion that the ancients were in the practice of placing statues of their gods at the prow as well as the stern of their vessels, to which latter part the author before quoted, together with Selden and Morin, seems to think the custom was restricted.

PATELLA. [Lat. from *patina*, πατάνη, Gr.] *In archaiology.* A small vase in use amongst the poorer orders of the Romans. It served also as a vessel whereon to offer fruits and vegetables to the lares or penates, household deities of a third or fourth-rate order; and on this account the Romans denominated those inferior deities *Patellarii Dii.* Caylus (*Recueil d'Antiquité*, tom. vii. pl. 77), has given a representation of a priestess seated in a sort of elbow chair, and who, according to him, was a priestess of the patella.

PATERA. [Lat. from *pateo*, I am open; quod *pateat*, having a great aperture.] *In modelling, sculpture, and architecture.* A vessel or goblet employed by the Romans in their sacrifices; wherein they offered their consecrated meats to the gods, and wherewith they made libations. It was also occasionally used to receive the blood of the victim.

The Romans appear to have derived this usage from the Etruscans, who shaped the *patera* round and shallow, with a handle underneath. The Etruscan pateræ are extremely interesting and useful towards obtaining a knowledge both of ancient languages and art. They offer us a species of engraving, the traits of which are considerably less deeply cut than those of our copper-plate engraving. Many curious

subjects drawn both from mythology and history are represented thereon; and the inscriptions underneath furnish us with examples of the Etruscan language and its characters.

The Romans, in adopting the use of the patera, wrought some changes in its shape. They occasionally retained the handle and occasionally suppressed it. In the solemnization of sacrifices, it seems almost necessary that the vessel should have a handle, but in its representation on ancient monuments it is often seen destitute of one, probably that the elegant contour of its form should not be interfered with. Originally these vases were made of terra cotta, but subsequently of bronze, gold, silver, and other valuable substances.

The Royal Cabinet of Antiquities at Paris possesses a magnificent one, in gold, of which Millin has given an ample description (together with a drawing) in his *Monumens Antiques Inédits*, tom. i. pl. 24. This elegant monument of art is nine inches and upwards in diameter. The subject represented on it is a contest between Hercules and Bacchus, as to which could drink most. Around we see the triumph of the conqueror of India over his strenuous antagonist; but the particular point which might be most strongly recommended to the artist desirous of copying from this celebrated antique is that at which the contesting deities have drained all their drinking cups except the last, which Bacchus is about to empty at one draught. He holds the vase with a firm hand, and looks scornfully on his vanquished rival, who appears to be sinking down from the effects of intoxication.

This beautiful vase was discovered at Rennes, in Brittany, on the 26th of March, 1774, by some masons who were at work in pulling down a chapter house.

On ancient medals the patera is seen in the hands of several deities, and frequently in the hands of princes, to mark the sacerdotal authority joined with the imperial. Hence, F. Joubert observes, that, besides the patera, there is frequently an altar upon which that vessel seems to be pouring its contents.

The patera was also sometimes enclosed in urns with the ashes of deceased persons, after it had served for the libations of wine and liquors at their funeral.

There is likewise an ornament in architecture thus denominated, which is frequently seen in the Doric frieze and the tympana of arches. They are occasionally used by themselves to ornament a space; and in this case, it is common to hang a string of husks or drapery over them: in other instances, they are much enriched with foliage, and have a mask or a head in the centre.

PATERNOSTER. [Lat. Our Father.] A chaplet or string of beads, so called because serving, among Roman Catholic devotees, to number their rehearsals of the Lord's prayer.

In architecture, a sort of ornament perhaps thus denominated from its resemblance to the before-mentioned, cut in the shape of beads either round or oval; used on baguettes, astragals, &c.

PATHETIC. [Gr. παθητικὸς, from πάσχω, to suffer.] *In painting and sculpture.* That which relates to the softer or more sorrowful passions, and which is calculated to awaken or excite them. See PASSIONS.

The artist should be careful to distinguish the pathetic from the terrible or violent. It is altogether of a different and milder character; and tends rather to depress and compose the feelings than to agitate and render them turbid. The pathetic may indeed be frequently blended with the comic, which the terrible never can; their elements will not amalgamate.

The reader may consult, on this subject, the thirty-sixth to forty-first chapter of the third volume of *Progymnasmata Poetica*, published by Florettus under the assumed name of Udeno Nisielli. The sixth chapter of the fourth book of *La Pratique du Théâtre*, by the Abbé Aubignac:—the 298th page of the Amsterdam edition of 1715 treats of *Discours pathétiques; ou, des Passions ou Mouvemens d'Esprit.* Clement, in the seventh chapter of his work on tragedy, page 173 of the first vol. speaks of *Pathétique de Situation*, principally with regard to the tragedies of Voltaire. We find also reflections on this subject in the greater part of those works which discourse of the principles and elements of the *belles-lettres.*

PATINA. [derived as former word through the Latin from πατάνη, Gr. from πετάω, to spread; in allusion to its shape.] *In modelling and sculpture.* A hollow vase or dish in which the ancients served up ragouts, fish, and other culinary preparations. It varied from that species of plate entitled *lanx*, which was used only for roasted viands. These *patinæ* were originally constructed of earth; but as the Romans became from a simple a luxurious people, they were, in common with other articles, whether of use or ornament, formed of more costly materials. We read

with surprise that Vitellius had one made, the cost of which was a million of *sestertia*, and for the making of which an oven was, according to the testimony of Pliny, purposely constructed.

In the Roman Catholic church the term *patina* or *patena* is used to denominate a sacred vase in the shape of a small plate of gold or silver, which serves to receive the consecrated wafer, and is given, to be kissed, both to the clergyman and to the people.

There is also a remarkably brilliant green or brownish colour thus called, which has been noticed in our remarks on the conservation of MEDALS (see that word), and which is regarded both as a proof of their genuine antiquity, and as a means by which they are preserved from deterioration.

This rust is sometimes counterfeited, and a false *patina* substituted for that which is true. The false varnish is black, greasy, and shining, and is besides very tender when touched with a burin or needle. The ancient, on the contrary, has none of these qualities, and is as hard as the coin itself. Mr. Pinkerton observes, that sometimes a light green, coalylike varnish is produced, spotted with a kind of iron marks. This is made of sulphur, verdigris, and vinegar; and is to be often distinguished, among other marks, by hair strokes of the brush with which it was laid on. The following hints are given by Vico, whom Pinkerton cites, respecting false patina. He describes it as green, black, russet or brown, gray, and iron colour. The green is made with verdigris; the black is smoke of sulphur; the gray is formed of chalk steeped in *urina*, in which the coin is left for some days. The russet most nearly approaches the natural patina, being a kind of froth formed by the fire from ancient coins; but when false it is too shining. The large brass coins of the Ptolemies are often employed in producing it, since they are frequently corroded: these are made red hot, and the medals being put in them, a fine rust adheres. Vico does not explain the process of iron colour. Sometimes, he says, they take an old defaced coin, covered with real ancient patina, and stamp it afresh: but the patina is then too bright in the cavities and too dull in the protuberances. It may be observed, in conclusion, that the trial of brass coins with the tongue is often serviceable; for, if modern, the patina tastes pungent or bitter; while, if ancient, it is perfectly tasteless.

PATRONAGE. Mr. Prince Hoare, in his interesting little work entitled *Epochs of the Arts*, has explained and illustrated the degree of patronage the fine arts have hitherto received in this country in a very clear, and, at the same time, concise manner; we cannot, therefore, do better than lay before our readers a few extracts, taken from different parts of his volume.

"The patronage afforded by the state to science and art in England, whether it tend in a greater or less measure to their advancement than in other countries, differs from that of all others in its mode of action. The claims of merit are not superficially viewed; long and accurate proofs of utility precede reward: a method which, if ultimately followed by commensurate support, is evidently fraught with the highest public benefits.

"The favour of England lingered in encircling him, whose discoveries have rescued nations from a loathsome disease. She beheld in silence the strife of regions, contending which should first enshrine him among the preservers of our race. Yet reward (perhaps less appropriate than philosophy might have desired), was unerringly advancing towards him, from the unanimous suffrages of her two legislative bodies.

"The progress of the arts of design may be regarded in a similar view. The merits of the English school are diffused over the continent: painters and sculptors have been courted to the most distant realms. The greatest historical work of Reynolds is in the palace at Petersburgh. The 'Cupid and Psyche' of Banks adorns the gardens of Czarsko-zelo. Engravings from West's pictures have been eagerly purchased in France; and the candid Watelet, in his *Dictionnaire des Arts*, acknowledged our pretensions to fame. What country or language has not welcomed the Discourses delivered by Reynolds at our Academy! The arts of design, rooted in our soil, are fostered in foreign lands. England alone tranquilly contemplates their growth;

'Conscious of highest worth, unmoved:'

They have blossomed and faded; they have adorned the sunshine with flowerets, and withered in the shade; alike unnoticed. Yet there is no reason to doubt, that, whenever their beneficial influence shall be explored, they will receive support from the same protecting wisdom and bounty, which have so often rewarded the labours of Science.

"The wonder excited in our artists by the inactivity of the English government

with respect to the arts of design, in comparison with the earnestness which other states have shown to encourage their advancement, has often led me to researches on the subject. Although the end of painting and sculpture, in common with other imitative arts, is justly said to be *delight*, I have been inclined to think, that it could not be for mere delight, or even for luxury, that they have been so diligently courted, and at such cost, by men of distinguished political abilities, to fix their abode in their several states. I was therefore led to suspect that *advantage* had also been in view. It appeared, that if any instance of their encouragement were to be singled out, in which splendour seemed to be the predominant object, it was certainly that of the adornment of Athens, under Pericles. Yet I could not but recollect, that, when that great statesman was called on to give an account of his large public expenditures, he justified himself, not by the value of the delight, or the glory produced by the arts, and to which his exertions had so confessedly contributed, but by their *utility*. Neither could I disregard the expression of Aristotle, when, in speaking of the study of painting, he calls the art 'serviceable to many purposes, and *useful to life*.'

"The utility of the arts bears a different construction, according to the different states and times to which it is referred. The arguments of Pericles at Athens were, that 'the city being well supplied with every thing necessary for supporting the war, the superfluity of their treasure should be spent on such works as, when finished, would be an eternal monument of their glory, and, during the execution of them, would diffuse riches and plenty among the people; for, so many kinds of labour, and such a variety of instruments and materials being requisite in these undertakings, every art would be exerted, and every hand employed; and the city would be not only beautified, but maintained, by itself*.'

"This apology for the arts stands on general grounds, applicable to all countries. Pericles does not even mention the aid which they afforded in Greece to the purposes of national worship; yet their effects, in that respect, were there of very high amount: and scarcely of less in Rome. In later times, besides the fame and immediate employment, which Pericles proposed as his sole aim, an extensive system of commercial industry is found to have multiplied the uses of painting, and to have increased the value of its influence to a prodigious amount; so that, in whatever modes of their operation we regard the arts of design, they will still appear unquestionably productive of *national utility*.

"The inadequacy of the support which the fine arts derive from the ordinary paths of national prosperity, has, in all countries, given birth to patronage; a mode of encouragement to which artists of genius have resorted, as a measure of necessity rather than of inclination. Patronage of an exalted kind has adorned the greatest states; and conducted, as it is, with honourable and virtuous purposes, it cannot fail, in its extension, to produce honour to our own.

"First in rank, amidst the patrons of English art, stood our late beloved and venerable sovereign, George the Third†. How pleasing a testimony will it bear of his benevolent and polished mind, that, at a time when the arts of design in England were languishing in the extreme, for want of sustenance to the artists; when they poured forth their complaints unheard in every other quarter, the heart of the sovereign was moved with compassion! *He* received the supplicants into his paternal care, and extended to them the solacing assurance of needful assistance! The Royal Academy rose under his auspices, and has been established in a building assigned to the public uses of the state; he permitted his name to be enrolled at the head of a numerous list of men, depressed by neglect, but zealous to increase the fame of their country by the merit of their attainments. At the same time that the sovereign thus generously extended his protection to the rising establishment of the Academy, nothing could be more graceful and amiable than the impartial candour of his conduct towards the Chartered Society of Artists, from which the Royal Academy had been formed. On the members of that Society addressing him, when the success of the exhibitions of the Royal Academy had instigated them to a similar undertaking, they were benignly answered, that 'The Society had his majesty's protection; that his majesty did not mean to encourage one set of men beyond another; that having afforded his favour to the Society by his royal charter, he had thought right also to encourage the new petitioners; that his intention was to

* Langhorne's *Plutarch's Lives*.

† And we hope it will not be considered indecorous if we add that he has left in this, as in other respects, a worthy successor.—EDITOR.

patronise the arts; that the Society might rest assured, his royal favour would be equally extended to both, and that he should visit their exhibitions as usual.'—See the Introduction to Edwards's *Anecdotes of Painters.* Graced by the favour of the sovereign during more than fifty years, the annual exhibitions of the Royal Academy have not only attracted continual public attention, but have produced a revenue equal to the entire maintenance of the Academy, without farther burden on the benevolence of the founder.

"About thirty years after the establishment of the Royal Academy, relief began to dawn anew on one description of artists. The parliament decreed funereal honours to our statesmen and heroes. These honours were ordered to be bestowed in the form of public monuments, erected in the cathedrals of the metropolis. Hero after hero crowned his life with glory, and vote after vote showered affluence on the sculptors.

"Lastly; sensible of individual merits, unjustly depressed or obscured, and forming generous designs for the support of a laborious class of men, employed in innocent and, perhaps, virtuous pursuits, a combination of opulent and highly cultivated persons arose to vindicate the friendless painters, and by timely aids to preserve their industry for the honour of their country. The British Institution purchased and opened a place of perpetual exhibition and sale for the works of British artists, and has, by its exertions, already distributed among them several thousand pounds.

"These are the chief supports which professional talents have received in this country; which have successively aided the course of the arts of design, and cheered the toils of the artists."

PAVEMENT. [Lat. *pavimentum*, from *pavio*, to plane.] The construction of streets, highways, or ground-floors in such a way as that they may be conveniently walked upon.

According to Isidorus, the Carthaginians were the first people who adopted the practice of paving their towns with stones. In imitation of them, Appius Claudius Cæcus paved the city of Rome 188 years after the expulsion of the kings, and he also constructed a road, which was named after him the *Appian* way. At length the Romans undertook the great improvement of paving the high roads which led out of the city, and these were gradually established throughout the whole of their empire, and the remains of them are found, in a greater or less degree of preservation, in the different provinces of which that immense empire was composed. Several of these public roads, besides the Appian, received their names from those of the parties who had dictated their construction. For instance:—Aurelius Cotta founded, in the year 512 after the foundation of Rome, the *Aurelian* way; Flaminius was the author of the *Flaminian* way; and the *Æmilian* way was executed by the command of Æmilius. The censors superintended the forming of these highways, and directed their situations, &c.

With regard to the pavements in the interior of the Roman edifices, they gave the designation of *contignata pavimenta* to such as were constructed upon stages of timber work; and the pavements denominated by them *coassationes* were made of oaken planks, of the kinds denominated *quercus æsculus* from its being regarded as little subject to warp. The opulent Romans appear to have had portable pavements carried about to pave their tents in time of war, as by Julius Cæsar. These were chiefly of musaic. See MUSAIC.

In Great Britain the pavement of the principal streets, &c. is generally of flint or rubble-stone, while churches, courts, stables, domestic offices, &c. are paved with tiles, bricks, flags, or fire stone; sometimes with a kind of free stone or rag stone. In some continental churches the pavement is of marble, and sometimes of musaic, as in the cathedral of St. Mark at Venice, &c.

In France the public roads, in common with the streets, courts, &c. are all paved with *gres* or gritt (a kind of free stone), and the elegance and convenience arising from the use of flag stones in the streets of English towns is unknown, even in Paris, where the pedestrian is in constant danger of being run down by the pole of a carriage.

In Amsterdam, and the chief cities of Holland, they denominate their brick pavement the *burghermaster's*, in order to distinguish it from that of flint or stone, which, usually occupying the middle of the street, serves as with us for carriages.

Pavements of free stone, flint, and flags, in streets, &c. are laid dry—i. e. in a bed of sand: those of courts, stables, ground rooms, &c. in a mortar made of lime and sand, or of lime and cement, especially if there be vaults or cellars underneath. Occasionally after laying a floor dry (particularly of brick), a thin mortar is spread over it, and swept backwards and forwards to fill up the joints.

There are numerous subdivisions of

pavements, according to the materials of which they are composed.

PAVILION. [*paviglione*, Italian.] *In architecture.* A species of turret or building usually insulated, and comprised beneath a single roof; sometimes square, and in other instances, of the shape of a dome—thus called from the resemblance of its roof to a tent.

This term is likewise given to those projecting pieces placed in the front of a building to mark the centre thereof, and occasionally it flanks a corner, and is then designated an *angular pavilion.* These pavilions are higher than the other parts of the building. The Louvre, at Paris, is flanked with four. The summer houses, &c. thrown up in gardens, may fairly be denominated pavilions.

PEARL. [*perle*, Fr. *perla*, Spanish.] *In the decorative arts.* A hard, white, shining body, generally roundish, and found in a testaceous fish resembling an oyster.

Pearls have been highly valued in all ages and by all nations habituated to the use of them. They have been uniformly ranked of the number of gems, yet their formation is the consequence of disease in the creature producing them—a distemper similar to that occasioning the *bezoars* and other strong concretions in different animals. The fish from which pearls are usually produced is the East Indian pearl-oyster, as it is commonly designated: other shells, it is true, yield them, such as the common oyster, the muscle, &c. but of an inferior kind.

Neither Herodotus nor Homer make any mention of this ornamental substance. Theophrastus does not seem to have perfectly understood its nature, speaking of it as a precious stone, although he admits it to be also discovered in shells. It would appear that the use of them began to spread abroad in Greece after the Persian war and the conquests of Alexander. We perceive, from ancient monuments referable to that period, that they were profusely employed to adorn the neck, arms, and ears. The stern Pallas, herself, is often decorated with a pearl necklace, and Venus almost constantly. See NECKLACE. In the instance of the latter goddess, the attribute of pearls was doubtless considered peculiarly applicable, as she was fabled to have arisen from the sea in a shell.

It does not appear that the ancient Egyptians accustomed themselves to the use of pearls until after the conquest of their country by the Macedonian Alexander, when luxury was carried to its highest degree. The celebrated Cleopatra, equally famous for her beauty, voluptuousness, and misfortunes, is represented on the medals cited by Vaillant (and which are to be found in the Cabinet of Antiquities of the Royal Library at Paris), with an ornament of triangular pearls. In fact, this princess was supposed to possess the finest specimens ever seen, and, in consequence, the Romans designated those which were most remarkable for size and brilliancy *cleopatrines.*

Pliny tells the story of the dissolution of a magnificent pearl by the Egyptian queen. She had vaunted to her lover, Antony, that she would expend, in a single banquet, ten millions of *sestertia.* Antony was disbelieving, and a wager ensued between them. (Plin. lib. ix. cap. 35. Macrob. *Sat.* lib. ii. cap. 15). The feast was provided, but presented nothing above the ordinary accompaniments of the festivities of princes. Antony, in a rallying tone, already demanded an account of the cost, but was answered that what he saw consisted merely of accessories, and that the queen herself would devour the ten millions of *sestertia.* She gave orders for the second course, and the officers of the banquet, instructed beforehand, set nothing before the queen save a vase containing vinegar. The triumvir gazed on her with impatience; while Cleopatra, detaching one of her most splendid pearls, cast it into the vase, the contents of which, when the jewel had dissolved therein (as it speedily did), she at once drank up, and the astonished Roman was declared to have lost his wager. Many conjectures have been hazarded regarding this story: but, however the circumstance might have been modified, the broad fact of the dissolution and swallowing of the pearl appears to be indisputable.

A similar tale is told of the spendthrift Clodius, who is said to have given each of his guests a pearl to drink dissolved in vinegar. After all, however high the compliment paid to the entertained, their potation could scarcely have been as agreeable as costly.

PECTINATUM TECTUM. [Lat.] *In architecture.* A kind of roof so called from its being shaped somewhat like a comb, and calculated for throwing off the rain-water in two ways.

PEDESTAL. [*pédestal*, Fr. from *pes, pedis*, a foot, Latin.] *In architecture.* This is a solid body, of square or round form, serving to support a column, statue, pilaster, or vase, &c. having three parts—the base, the dye, and the cornice. No particular

proportions can be laid down for them, but it is usual to allow to them one quarter, or from that to one third of the height of the column and entablature; and this being divided into nine parts, two are for the base, one for the cornice, and six for the die (which is of similar dimensions with the plinth of the column). One pedestal is sufficient for two columns placed together, and a continued pedestal with projections in the cornice under each column should be used for a peristyle or colonnade. Pedestals vary, both in their shape and ornaments, according to the order of architecture which surmounts them.

PEDIMENT. [same derivation, from the Latin word *pes.*] *In architecture.* An ornament, generally low and triangular in shape, that crowns the ordonnances, finishes the fronts of buildings, and serves as a decoration over gates, doors, windows, &c. See AETOS, EAGLE, FASTIGIUM, GABLE, TYMPANUM.

PELTA. [πέλτη, properly a dart, from παλλω, to throw.] *In archaiology.* The Greek and Latin authors give this name to a species of buckler or shield of Thracian or Amazonian origin: but the former of these kinds differs from the latter, in having two slopes or cuts, while the Amazonian *pelta* had but one, and was described as resembling a lunar crescent, as indeed it is represented on ancient medals and other monuments. There is a drawing of one in Millin's *Monumens Antiques Inédits* (vol. ii. pl. 18).

PEN. [*penna*, Lat.] *In drawing.* Drawings with the pen were frequent among the ancients. Treated in a masterly way, this style is not much less expeditious than that with crayons, and is certainly susceptible of more spirit and taste. There is a great number of studies made with the pen left by Titian. Some artists have drawn with a fine pen, and in a light style; other have used a coarser instrument, laid on a greater quantity of ink (sometimes even with the finger), and attempted an air of greater spirit and fire. Other artists, again, have exerted sufficient patience on pen and ink drawings to enable them to vie with the delicate exactitude of the graver. This department of art is, however, now rarely practised. The prints of the Caracci afford excellent models of it.

Various different sorts of ink are employed in pen and ink drawings—such as black, green, blue, red, &c. but Indian ink is the most serviceable.

PENATES. [from *penus*, Lat. provisions; or, perhaps, simply, from *penitus*, within.] *In archaiology.* Every house, among the Romans, as well as every city, had its presiding deities: the *penates*, who were supposed the protectors of the masters of families, their wives, and children, and the *lares*, who presided over housekeeping, the servants, and household affairs. See LARES. The *penates* are figured nowhere but in a picture in the Vatican Virgil. There were public *penates*, who were the guardians of the state, as the others were of families. The penates were properly the tutelar gods of the Trojans, from whom the Romans adopted them.

PENCIL. [Lat. *pencillum.*] *In painting, drawing*, &c. An instrument employed by painters in laying on their colours. The ancients appear to have used sponges for this purpose, which instrument had, however, several inconveniences, as will be obvious from a moment's consideration of its nature and shape. The pencil was, at length, as the art advanced, substituted for the sponge, and this, again, gave way to the introduction of the brush, at least, in paintings of a larger size, where breadth and substance of colour are requisite.

Pencils are of various kinds, and constructed of as various materials. The largest sorts, or brushes, are made of boar's bristles, the thick ends of which are bound to a stick, larger or smaller, proportionate to the purposes they are meant to be applied to. The finer sorts of pencils are made of camel's, badger's, and squirrel's hair, and of the down of swans: these are fastened at the superior extremity by a piece of strong thread, and enclosed in the barrel of a quill. All good pencils, on being drawn between the lips, come to a fine point.

In drawing. The pencil used in drawing is made of long pieces of black lead or red chalk, placed in a groove cut in a slip of cedar; on which other pieces of cedar being glued, the whole is planed round, and one of the ends being cut to a point, it is fit for use.

PENDANT. [Lat. *pendeo*, to hang.] *In painting*, &c. This term is applied to one of two paintings, or prints, which, having equal dimensions with each other, are attached, in a parallel manner, to the same wall. Perhaps a better word for our meaning would be *pairs*.

Although conformity of size should, questionless, be the principal object with regard to pictures thus circumstanced, yet similarity of design is highly desirable, as well as of colour and effect. For instance, it would appear inharmonious and untasteful to balance a picture of a clear tone

with one dusky or enveloped in shade; a sorrowful or pathetic subject with a lively or bustling one, &c. &c. Portraits are often placed in situations of this nature, and it is then desirable that they should be so painted as to have the eyes bent upon each other, that the expression of the faces may meet. The noblest species of pendants are such as face each other from the two extremities of a long gallery, and in saying this, we are reminded of a fine specimen in the gallery of Paul Methuen, Esq. of Corsham, Wiltshire, where two exquisite pictures of Claude, representing *Morning* and *Evening*, are put in this kind of juxta-position.

It will be obvious, from the derivation of the word, that this term cannot with propriety be applied to two statues similarly placed, although it may be extended to *bassi rilievi*.

PENETRALIA. [*penetrale*, from *penitus*, within, Lat.] *In archaiology.* Among the ancients, this term was applied to a small chapel dedicated, in the very heart of their domestic abodes, to the deities called *penates*. It was a place sacred and retired, a sort of *sanctum sanctorum*, wherein they deposited whatever was held by them as most valuable either intrinsically or from sentiment.

PENITENCE. [*penitentia*, Lat. from *pœna*, punishment.] *In allegorical painting and sculpture.* The iconologists have represented this quality under the figure of a woman, thin, pale, clothed in a white vestment, though none of the purest, and seated on a stone by a brook, which she augments with her tears. She has ashes on her head (a symbol of penitence among the Jews), and tears her garments. She is also accoutred with a large black veil, has a cross in her hands, and upon her knees rest the gospel and the scourge.

PENTADORON. [πενταδορον, Gr.] *In ancient architecture.* That species of bricks employed by the Greeks in the construction of their public edifices. It was of the length of five palms. See BRICKMAKING, TETRADORON.

PENTASTYLE. [Gr. πέντε, five, and στυλος, a column.] *In architecture.* An edifice having five columns in front.

PENTATHLE. [Gr. πέντε, five, and ἆθλος, a combat.] *In archaiology.* An assemblage of several gymnastic exercises, and those individuals who addicted themselves thereto were denominated in the same way. The most general opinion is, that these games consisted of wrestling, running, quoiting, and hurling the javelin. In the celebration of the public games, the morning was devoted to the more rapid and lithesome exercises, the afternoon to the weightier and rougher ones. There being but one prize, it was necessary, in order to win it, to conquer in all the five exercises, unless one party (which was seldom the case) voluntarily gave in to the other, or unless both combatants, by their own free will, reduced the number of trials. See GYMNASIUM, PALÆSTRÆ.

PENTELICAN MARBLE. *In architecture, statuary*, &c. Drawn from a mount called Penteles, near Athens, and greatly sought after by the Grecian artists.

This marble has been a good deal misunderstood, with respect to its peculiar character. Winckelmann, in his History of Art, has given a mistaken definition of it, confounding the Pentelican with other species of Greek marble. The celebrated French mineralogist, Dolomieu, was perhaps the first to recognise the true Pentelican marble in that denominated by workmen *cipola*, because it is like foliage. The Pentelican marble is distinguished by the beautiful fineness of its grain, and by its being variegated occasionally with greenish spots.

PENULA. [*pænula*, Lat.] A close thick riding cloak worn among the Romans, for a protection either against cold or rain. Cicero, Tacitus, Buonarroti, &c. describe it as being fast at the sides, and having no other opening than that through which the head was passed in putting it on. This was, no doubt, its earliest form: but it appears that, in after usage, for the sake of greater convenience, they constructed lateral openings or slits for the passage and exercise of the arms.

PENUMBRA. [Lat. *pene*, almost, and *umbra*, a shade.] *In painting, drawing*, &c. That point of a picture or drawing where the shade blends itself with the light. The principles of the art demand that these gradations should be nearly imperceptible.

PEPERINO. [Italian.] *In architecture.* In the environs of the city of Rome is worked a species of stone of a deep gray colour, and obtained from the neighbourhood of Alba and Tivoli. That found near the first-mentioned place bears, at this day, the name of *peperino;* and the other, found near Tivoli, is called *travertino.* These two kinds of stone (much esteemed on account of their fine quality) were employed more frequently than others, not only in the places near which they were discovered, but also in the city of Rome itself. The first-mentioned stone served to construct an ancient tomb near Albano; while, at Rome, the great common sewer,

the foundations of the Capitol, and the column called the *Rostral*, were formed of the same substance.

PEPLUS or PEPLUM. [Gr. πέπλος.] *In ancient costume.* Synonyme of the *palla* of the Romans (see that word). This habit was always worn over the others, and took, under the same appellation, different shapes. Sometimes it was a long and ample mantle, sometimes a vestment shorter than the tunic, and attached by a clasp. This latter sort of peplum, indeed, greatly resembled a tunic, which name Pollux has extended to it.

In the third plate of the third volume of *Pitture d'Ercolano*, Diana is seen conducted by Love towards Endymion; she is habited in this light mantle, which floating a part in the wind, exhibits the goddess half naked.

Under the title of the *peplum* of Minerva is designated a piece of white stuff, embroidered with gold, on which were represented the memorable actions of that goddess, as likewise of Jupiter, and other divinities. They bore the peplum in the processions of the greater *panathenæa* (see that word).

PERFIDY. [*perfidia*, Lat.] *In allegorical painting and sculpture.* Cochin represents perfidy under the figure of a woman whose headdress consists of serpents partly hidden. She holds in her hand a net and a fish-hook.

PERGULA. [Lat.] *In ancient architecture.* Designated that part of a house now commonly denominated the gallery. It was also called *magistralis* by Vopiscus. The painters, as well as grammarians, mathematicians, and, indeed, the teachers of all the liberal arts and sciences, gave their lessons in the different galleries assigned to them. In Plautus, this word is used to indicate the balcony of a house, at which the courtezans were in the habit of placing themselves, in order the more readily to be noticed by the passers-by. Winckelmann seems, however, to incline to the opinion that *pergula*, more properly speaking, meant an arbour in a garden, or perhaps a terrace overhanging one.

PERIACTOS. [Gr. περὶ, around, and ἄγω, to act.] *In archaiology.* A certain machine used in the ancient Greek theatres, spoken of by Vitruvius and others. It appears to have served to produce certain changes in the decoration of the scene, and was composed of three sashes or frames, being placed on a pivot so as to admit of its working easily. On each of these frames was presented a different scene, and the whole was so placed that each of the three sashes was in turn submitted to the eye of the spectator, while the other two were concealed behind.

PERIBOLOS. [Gr. περὶ, around, and βάλλω, to throw.] *In archaiology.* Several temples of the ancients were surrounded by a *peribolos*—that is to say, a court or enclosure, within a wall which separated it from the adjoining ground as a place sacred and appertaining to the temple. It was generally adorned with a profusion of statues, altars, and monuments. Sometimes it contained other smaller temples, or even a sacred grove.

PERIDROME. [περὶ, around, and δρομος, a course or parade.] *In archaiology.* This name implies that part of a periptery, which, in the shape of a gallery, or alley, or other open space, was left between the columns and the walls. The peridromes served as promenades among the Greeks.

PERIL. [Fr. from *periculum*, Lat.] *In allegorical painting and sculpture.* Cochin represents it as a young man, who, resting on a slender reed, walks upon the banks of a precipice, beneath which flows a torrent. A serpent, concealed under the herbage, is in the act of darting at him.

PERIODONIC. [περὶ, and ὁδὸς, a way.] *In archaiology.* Those who bore away the victory in the four ancient sacred games of Greece. Whatever the species of combat, this was the name given to the successful combatant. The name was derived from περιοδος, in consequence of the celebration of these games recurring at fixed periods.

PERIPTERY. [περὶ, and πτερον, a wing, which from πέτω, to expand.] *In ancient architecture.* An edifice or temple environed, in its exterior circumference, by a range of insulated columns distant from the wall to the extent of an intercolumniation. These structures are occasionally both square and round. As instances we may mention the portico of Pompey, the basilica of Antoninus. See PERIDROME.

PERIPTERAL. [id quod *periptery*.] *In architecture.* Having columns all around. According to Vitruvius, the fourth order of temples. See ARCHITECTURE, PERIPTERY.

PERIRRHANTERION. [Gr. περιῥαίνω, to sprinkle.] *In archaiology.* Among the ancients they generally placed, at the entrance of their temples, vases filled with pure water, with which the priests both laved their own hands, and sprinkled such as entered. In the fifth volume of the *Pitture d'Ercolano*, pl. 69, are exhibited, at the gate of a religious edifice, two lus-

tral vases, in each of which is a laurel branch, serving doubtless for purposes of the nature alluded to. The one branch or stick, larger than the other, is attached to the vase by a chain. From this practice, we have little hesitation in saying, arose the system of *holy water*, and sprinkling therewithal, used still by the followers of the Roman Catholic church.

PERISCILIS or PERISCILIDE. [Gr. περί, and σκελος, the leg.] *In ancient costume.* A circular ornament used by the Greeks, and attached sometimes to the leg and sometimes to the arm, but principally to the former member. They corresponded, in some degree, with the *armillæ* of the Romans.

PERISTYLE. [Gr. περί, and στυλος.] *In ancient architecture.* A range of columns, or colonnade, within a court or building like a cloister: the internal colonnade to the hypæthral temple is a peristyle.

PERSEPOLIS. [Πέρσης, Persian, and πολις, a city.] *In the history of the arts.* Formerly the capital of Persia, and now in ruins, but still remarkable for the most magnificent remains of a palace or temple that are now perhaps to be found in the world. This city stood in one of the finest plains in Persia, being eighteen or nineteen leagues in length, and in different places, two, four, or six leagues in breadth. It is watered by the great river Araxes, now Bendemir, and by a multitude of rivulets besides. Within the compass of this plain are between one thousand and one thousand five hundred villages, all adorned with pleasant gardens, and planted with shady trees. The entrance of this plain on the west side has received as much grandeur from nature, as the city it covers could do from industry or art. It consists of a range of mountains steep and high, four leagues in length, and about two miles broad, forming two flat banks, with a rising terrace in the middle, the summit of which is perfectly plain and even, all of native rock. In this there are such openings, and the terraces are so fine and so even, that one would be tempted to think the whole the work of art, if the great extent, and prodigious elevation thereof, did not convince one that it is a wonder too great for aught but nature to produce. Undoubtedly these banks were the very place where the advanced guards from Persepolis took post, and from which Alexander found it so difficult to dislodge them. One cannot from hence descry the ruins of the city, because the banks are too high to be overlooked: but one can perceive on every side the ruins of walls and of edifices, which heretofore adorned the range of mountains of which we are speaking. On the west and on the north this city is defended in the like manner: so that, considering the height and evenness of these banks, one may safely say, that there is not in the world a place so fortified by nature.

The mountain Rehumut, in the form of an amphitheatre, encircles the palace, which is one of the noblest and most beautiful pieces of architecture remaining of all antiquity. Authors and travellers have been exceedingly minute in their descriptions of these ruins; and yet some of them have expressed themselves so differently from others, that, had they not agreed with respect to the latitude and longitude of the place, one would be tempted to suspect that they had visited different spots. These ruins have been described by Garcias de Silva Figueroa, Pietro de la Valle, Chardin, Le Brun, and Mr. Franklin. We shall adopt the description of the latter, as being exceedingly distinct, and given by a traveller intelligent and unassuming. The ascent to the columns is by a grand staircase of blue stone containing one hundred and four steps.

The first objects that strike the beholder on his entrance are two portals of stone, about fifty feet in height each; the sides are embellished with two sphinxes of an immense size, dressed out with a profusion of bead-work, and, contrary to the usual method, they are represented standing. On the sides above are inscriptions in an ancient character, the meaning of which no one hitherto has been able to decipher.

At a small distance from these portals you ascend another flight of steps, which lead to the grand hall of columns. The sides of this staircase are ornamented with a variety of figures in basso rilievo; most of them have vessels in their hands: here and there a camel appears, and at other times a kind of triumphal car, made after the Roman fashion; besides these are several led horses, oxen, and rams, that at times intervene and diversify the procession. At the head of the staircase is another basso rilievo, representing a lion seizing a bull; and close to this are other inscriptions in ancient characters. On getting to the top of this staircase, you enter what was formerly a most magnificent hall; the natives have given this the name of *chehul minar*, or forty pillars; and though this name is often used to express the whole of the building, it is more particularly appropriated to this part of it. Although a vast number of ages have

elapsed since the foundation, fifteen of the columns yet remain entire; they are from seventy to eighty feet in height, and are masterly pieces of masonry: their pedestals are curiously worked, and appear little injured by the hand of time. The shafts are enfluted up to the top, and the capitals are adorned with a profusion of fretwork.

From this hall you proceed along eastward, until you arrive at the remains of a large square building, to which you enter through a door of granite. Most of the doors and windows of this apartment are still standing; they are of black marble, and polished like a mirror: on the sides of the doors, at the entrance, are bassi rilievi of two figures at full length; they represent a man in the attitude of stabbing a goat: with one hand he seizes hold of the animal by the horn, and thrusts a dagger into his belly with the other; one of the goat's feet rests upon the breast of the man, and the other upon his right arm. This device is common throughout the palace. Over another door of the same apartment is a representation of two men at full length; behind them stands a domestic holding a spread umbrella: they are supported by large round staffs, appear to be in years, have long beards, and a profusion of hair upon their heads.

At the south-west entrance of this apartment are two large pillars of stone, upon which are carved four figures; they are dressed in long garments, and hold in their hands spears ten feet in length. At this entrance also the remains of a staircase of blue stone are still visible. Vast numbers of broken pieces of pillars, shafts, and capitals are scattered over a considerable extent of ground, some of them of such enormous size, that it is wonderful to think how they could have been brought whole, and set up together. Indeed, every remains of these noble ruins indicate their former grandeur and magnificence, truly worthy of being the residence of a great and powerful monarch.

These noble ruins are now the shelter of beasts and birds of prey. Besides the inscription abovementioned, there are others in Arabic, Persian, and Greek. Dr. Hyde observes, that the inscriptions are very rude and unartful; and that some, if not all of them, are in praise of Alexander the Great; and therefore are later than that conqueror.

PERSES. See CARYATIDES.

PERSIAN ARCHITECTURE. See ARCHITECTURE.

PERSONIFICATION. [Lat. *persona*, and *facio*, to make:—i. e. to change things into persons.] *In painting and sculpture.* "So strong (says the ingenious Dr. Blair, in his *Lectures on Rhetoric*) is that impression of life which is made on us by the more magnificent and striking objects of nature especially, that I doubt not in the least of this having been one cause of the multiplication of divinities in the heathen world. The belief of dryads and naiads, of the genius of the wood and the god of the river, among men of lively imaginations in the earliest ages of the world, easily arose from this turn of mind. When their favourite rural objects had often been animated in their fancy, it was an easy transition to attribute to them some real divinity, some unseen power or genius which inhabited them or in some peculiar manner belonged to them. Imagination was highly gratified by thus gaining somewhat to rest upon with more stability; and when belief coincided so much with imagination, very slight causes would be sufficient to establish it. From this deduction may be easily seen how it comes to pass that personification makes so great a figure in all compositions where imagination or passion has any concern. On innumerable occasions it is the very language of imagination and passion, and therefore deserves to be attended to and examined with particular care."

The artist must be cautious in this department, that he be not seduced into absurdity in his choice of vehicles for personification: but that a general spirit of propriety be preserved, as well as, particularly, some tolerably recognisable resemblance to the thing personified. For further observations on the subject we beg to refer the reader to our article ALLEGORY.

PERSPECTIVE. [Lat. *per*, through, and *specio*, to behold.] *In all the arts.* That branch of optics which teaches how to represent objects on a plane surface, in the manner wherein they appear under the peculiarities arising from distance or height. This is a science of the first importance to a painter; yet, at the same time, he is not to be too strictly confined to its rules, but to endeavour to render them subservient to his own purposes. Nothing, indeed, should be permitted to tie up his hands or cramp his genius; on the contrary, he should be left fully at liberty to express his idea with one stroke of his pencil; and, as Fresnoy advises, "let the compasses be rather in his eyes than in his hands;" in that way let him measure distinctly every object by comparison—the principal talent

which he should own. If he is well acquainted with the principles of his art, he will not stop at the dry rules of geometry, while his fancy is sketching all the chief parts of his picture; but proceed with the whole, and when the design is arranged, then correct all those portions which require it by the laws of perspective.

But while, on the one hand, we are anxious to guard the student against dwelling too much on the more mechanical parts of his interesting art, we must, on the other, strive to impress on his mind that a thorough knowledge and an undeviating attention to this important branch of it is not only eligible but *indispensable*. The study of it should, indeed, go hand in hand with that of anatomy, as not less fundamental and necessary.

The contour of an object drawn upon paper or canvass represents nothing more than such an intersection of the visual rays sent from the extremities of it to the eye as would arise on a glass put in the place of the paper or canvass. Now, the situation of an object at the other side of a glass being given, the delineation of it in the glass itself depends entirely on the situation of the eye on this side of the glass; in other words, on *the rules of perspective*.

We will illustrate this by a familiar instance. Suppose a spectator to be looking at a prospect without doors, from within, through a glass window:—he will perceive not only the vast extent which even so small an aperture will admit to be seen by his eye, but also the shape, size, and situation of every object, upon the glass. If the objects are near the window, the spaces they occupy on the glass will be proportionably larger than when they are at a greater distance; if they are parallel to the window, then their shapes upon the glass will be parallel likewise; if they are oblique, then their shapes will be oblique, and so on. And he will always perceive that, as he alters the situation of his eye, the situation of the objects upon the window will be altered also: if he raises his eye ever so high, the objects will seem to keep pace with it and rise higher upon the window, and the contrary if he places it ever so low. And thus, in every situation of the eye, the objects upon the window will appear to rise higher or lower; and consequently, the depth of the whole prospect will be proportionably greater or less as the eye is elevated or depressed, and the horizon will in every situation of the eye be upon a level with it: that is, the horizontal line, or that imaginary line which parts the earth and sky, will seem to be raised as far above the ground upon which the spectator stands, as his eye is removed from the same place. Now, suppose the person at the window looks through an upright pane of glass at any object beyond it, and, keeping his head steady, draws the figure of the object upon the glass with a black-lead pencil, as if the point of the pencil touched the object itself; he would then have a true representation of the object in perspective as it appears to his eye.

In order to this, two things are necessary:—first, that the glass be laid over with strong gum-water, which when dry will be fit for drawing upon, and will retain the traces of the pencil; and secondly, that the spectator looks through a small hole in a thin plate of metal, fixed about a foot from the glass, between it and his eye, and that he keeps his eye close to the hole; otherwise he might perhaps shift the position of his head, and consequently make a false delineation of the object.

Having traced out the figure of the object, he may go over it again with pen and ink; and when that is dry, put a sheet of paper upon it, and trace it thereon with a pencil: then taking away the paper and laying it on a table, he may finish the picture by giving it the colours, lights, and shades, as he sees them in the object itself, of which he will then have a true resemblance.

To every person who possesses a general knowledge of the principles of optics, this must be self-evident: for, as vision is occasioned by pencils of rays coming in straight lines to the eye from every point of the visible object, it is plain that, by joining the points in the transparent plane through which all those pencils respectively pass, an exact representation must be formed of the object as it appears to the eye in that particular position and at that determined distance: and were pictures of things to be always first drawn on transparent planes, this simple operation, with the principle on which it is founded, would comprise the whole theory and practice of perspective. As this, however, is far from being the case, rules must be deduced from the sciences of optics and geometry for drawing representations of visible objects on opaque planes; and the application of these rules constitutes what is properly called the *art* of perspective.

The following definition of the principle features in this art will, we hope, prove useful to the student. *Projection* delineates objects *in plano* by means of right

lines called rays, supposed to be drawn from every angle of the subject, to particular points. When the objects are angular, these rays necessarily form pyramids, having the plane or superfices whence they proceed for their basis; but when drawn from or to circular objects, they form a cone.

Ichnography, or ichnographic projection, is described by right lines parallel among themselves and perpendicular to the horizon from every angle of every object, on a plane parallel to the horizon: the points where the perpendicular lines or rays cut that plane being joined by right lines. The figure projected on the horizontal plane is likewise called the plan or seat of that object on the ground plane. The points are the sites, or seats, of the angles of the object. The lines are the seats of the sides. By this we are to understand how the basis of figures represented as superstructures stand or are supported; and we are further enabled to judge of, indeed to measure, their several parts and their areas.

Orthography represents the vertical position and appearance of an object; and hence orthographic projection is called the *elevation*. When we see the front of a house represented, we give it that term—when the side, we denominate it the *profile*. If we suppose a house, or other object, to be divided by a plane passing perpendicularly through it in a line at right angles with the point, we call it the lateral section; but if the plane pass in a direction parallel with the front, it is termed a longitudinal section. If the plane passes in neither of the former directions (not however deviating from the vertical), it is said to be an oblique section.

These afford us the means of laying down plans, of showing the parts, and the manner in which the interiors of edifices are arranged, consequently are indispensable to the architect or surveyor, and indeed should be understood by every individual connected any way with designing or building. Nor should the following be neglected;—namely, *Scenography*, which shows us how to direct the visual rays to every point or part of a picture; and *Stereography*, which enables us to represent solids on a plane, from geometrical projection; whence their several dimensions, viz. length, breadth, and thickness, may all be represented and correctly understood at sight. We conclude our readers to have acquired some knowledge of geometry before they commence on this or any other of the abstract sciences founded thereon.

An *original object* is that which becomes the subject of the picture, and is the parent of the design. *Original planes* or *lines* are the surfaces of the objects to be drawn; or they are any lines of those surfaces; or, they are the surfaces on which those objects stand. *Perspective plane* is the picture itself, which is supposed to be a transparent plane, through which we view the objects represented thereon. *Vanishing planes* are those points which are marked upon the picture by supposing lines to be drawn from the spectator's eye parallel to any original lines, and produced until they touch the picture. *Ground plane* is the surface of the earth or plane of the horizon, on which the picture is imagined to stand. The *ground line* is that formed by the intersection of the picture in the ground plane. The *horizontal line* is the vanishing point of the horizontal plane, and is produced in the same manner as any other vanishing line, i. e. by passing a plane through the eye parallel to the horizontal plane. The *point of sight* is the fixed point from which the spectator views the perspective plane. *Vanishing points* are the points marked down in the picture by supposing lines to be drawn from the spectator's eye parallel to any original lines, and produced until they touch the picture. The *centre* of a picture is that point on the perspective plane where a line drawn from the eye perpendicular to the picture would cut it; consequently it is that part of the picture which is nearest to the eye of the spectator.

The *distance* of the picture is that from the eye to the centre of the picture. The distance of a vanishing point is the distance from the eye of the spectator to that point where the converging lines meet, and after gradually diminishing all the objects which come within their direction and proportion, are reduced so as, in fact, to terminate in nothing. All parallel lines have the same vanishing points; that is to say, all such as are, in building, parallel to each other, when not represented precisely opposite to, and parallel with, the eye, will appear to converge towards some remote point, i. e. their vanishing point. Circles, when retiring in such manner, are represented by ellipses, proportioned to their distances: their dimensions in perspective are ascertained by enclosing them, or the nearest of them, where a regular succession is to be portrayed within a square, which being divided into any number of equal parts or chequers, will exhibit all the proportions of those more remote.

A bird's eye view is supposed to be taken from some elevated spot which commands a prospect nearly resembling the plane or ichnography of the places seen. Thus the view from a high tower, or from a mountain, whence the altitudes of the various objects on the plane below appear much diminished, gives nearly the same representation as is offered to a bird flying over them—and hence the term. Some idea of this may be obtained by standing on any height, and observing how low those objects which are near thereto will appear when compared with those more distant; taking however the perspective diminution of the latter into consideration.

When a painter has formed a scene in his mind, and supposed, as is customary, that the principal figures of this scene lie close, or almost close, to the back of his canvass, he is, in the next place, to fix on some point on this side of the canvass from which he would choose his piece should be seen. But in choosing this point, which is called the *point of sight*, regard should be had to its situation to the right or left of the middle of the canvass; but, above all things, to its distance and height with respect to the lower edge of the canvass; which edge is called the *base line*, and is parallel with the horizontal line which passes through the eye. For by assuming the point of sight, and consequently the horizontal line, too low, the planes upon which the figures stand will appear a great deal too shallow; as by assuming it too high, they will appear too steep, so as to render the piece far less light and airy than it ought to be. In like manner, if the point of sight is taken at too great a distance from the canvass, the figures will not admit of degradation enough to be seen with sufficient distinctness: and if taken too near it, the degradation will be too quick and precipitate to have an agreeable effect. Thus, then, it is evident that no small attention is requisite in the choice of this point.

When a picture is to be placed on high, the point of sight should be assumed low, and *vice-versa:* in order that the horizontal line of the picture may be, as near as possible, in the same horizontal plane with that of the spectator; for this disposition has a surprising effect. When a picture is to be placed very high, as, amongst many others, that of the Purification, by Paolo Veronese, it will be proper to assume the point of sight so low that it may lie quite under the picture, no part of whose ground is in that case to be visible; for, were the point of sight to be taken above the picture, the horizontal ground of it would appear sloping to the eye, and both figures and buildings as ready to tumble head-foremost. It is true, indeed, that there is seldom a necessity for such extraordinary exactness; and that, unless in some particular cases, the point of sight had better be high rather than low: as a reason for which we may observe, that as we are more accustomed to behold people on the same plane with ourselves than either higher or lower, the figures of a piece must strike us most when standing on a plane nearly level with that on which we ourselves stand. To this it may be added, that by placing the eye low, and greatly shortening the plane, the heels of the back figures will seem to bear against the heads of the foremost, so as to render the distance between them far less perceptible than it would otherwise be.

The point of sight being fixed, according to the situation in which the picture is to be placed, the *point of distance* is next to be determined. In doing this, a painter should carefully attend to three things:—first, that the spectator may be able to take in, at one glance, the whole and every part of the composition; secondly, that he may see it distinctly; and thirdly, that the degradation of the figures and other objects of the picture be sufficiently sensible.

But we cannot afford room to go into further particulars on this important subject, and will conclude our sketch by briefly adverting to its progress in the history of the arts.

Perspective owes its origin to painting, and more especially to that department of it employed in the decorations of the ancient theatres, wherein landscapes were a great deal introduced, the very essence of which peremptorily required that the objects represented should be modified according to their distance from the eye. Vitruvius tells us, that Agatharcus, the disciple of Æschylus, was the first who wrote upon this subject; and that subsequently the principles of the art were more clearly elucidated by Democritus and Anaxagoras, the followers of Agatharcus. Of the nature of their descriptions we must be content to remain in total ignorance, since none of their writings are extant. It is most probable that their knowledge of the art did not reach far. The revival of painting, in Italy, was accompanied by a revival of the art of perspective.

The Arabians were not ignorant of this art, as appears from the optical writings of Alhazen (who flourished about the year

1100), and whose work is cited by Roger Bacon, who himself treated the subject with surprising accuracy, considering the time at which he lived.

The oldest authors who professedly gave rules respecting perspective were, however, Bartolemeo Bramantino, of Milan, whose book *Regole di Prospettiva, e Misure delle Antichita di Lombardia*, is dated 1440; and Pietro del Borgo, who most likely wrote still earlier, as he is said to have died in 1443. Various other works followed, which will be enumerated hereafter:—to Balthazar Peruzzi, of Sienna (who had diligently studied the writings of Borgo, we owe, it is reported, the discovery of points of distance, to which every line that makes an angle of 45° with the ground line is drawn; and Guido Ubaldi soon after discovered, that all the lines parallel to each other, if they be inclined to the ground line, converge to some point in the horizontal line: and that through this point, also, a line drawn from the eye parallel to them will pass. Ubaldi's Perspective was printed at Pesaro in 1600, and may be said to contain the first principles of the method afterwards established by Dr. Brook Taylor.

This latter gentleman has done much towards improving the art of perspective. His principles are in a considerable degree novel, and far more general than those of either of his predecessors. His system is the only one calculated for answering the views of such as are practitioners in the art of design, and it includes an explanation of the perspective of shadows, the reflection of objects from polished planes, and the inverse practice of perspective.

Aerial perspective is the art of giving a due diminution or degradation to the strength of the lights, shades, and colours of objects, according to their different distances, the quantity of light which falls on them, and the medium through which they are seen.

A painter who would succeed in aerial perspective ought carefully to study the effects which distance, or different degrees, or colours of light have on each particular original colour, in order to know how its hue or strength is altered under various circumstances, and to represent it accordingly. As all objects in a picture take their measures in proportion to those placed in the front, so, in aerial perspective, the strength of light, and the brightness of the colours of adjacent objects, must serve as a measure, with respect to which all the same colours at several distances must have a proportionate degradation in similar circumstances.

In order, therefore, to give any colour its proper diminution in proportion to its distance, it ought to be ascertained what the appearance of that colour would be were it close to the picture; regard being had to that particular light which is chosen as the principal light of the picture. For if any one colour should be rendered too bright for another, or for the general colours employed in the rest of the composition, it will appear too glaring, seem to start out of its place, and throw a flatness and damp on the rest of the work: or, as the painters express it, the brightness of that colour will kill the rest.

Perspective machine is an instrument by which any person, without the assistance of the rules of art, may delineate the true perspective figures of objects. Mr. Ferguson has described a machine of this kind, the invention of which he attributes to Dr. Bevis.

The term *perspective* is likewise used for a sort of picture or painting frequently seen in gardens and at the end of galleries; and the object of which is to deceive the eye by representing the continuation of an alley, landscape, building, &c.

The number of works produced on the subject of this article has been very great. It will suffice, for our purpose, to cite the most considerable and celebrated of them, and, above all, those which treat of perspective relatively to art and artists.

In the Latin language we find:—Johannis CANTUARIENSIS, *Perspectiva*, Pisa, 1508, folio; an Italian translation of which with notes was published, by Galucci, at Venice, 1593, folio. C. VITTELLIONIS, *De Natura, Ratione, et Projectione Radiorum Visus, Luminum, Colorum, atque Formarum, quam vulgo Perspectivam vocant*, libri x. Norimb. 1551, folio, with plates. Joa. Fr. NICERONI, *Taumaturgus Opticus studiosissimus Perspectivæ*, Paris, 1638, folio; a French translation of this appeared also at Paris, under the title of *Perspective Curieuse*, 1663, folio. Guido UBALDUS, *Perspectiva*, 1600, folio. *Perspectiva Horaria, Auct.* Em. MAIGNAN, Rome, 1648. Andrea PUTEI, surnamed PORZI, *Perspectiva Pictorum et Architectorum* (Latin and Italian), Rome, 1693-1700, 2 vols. folio, with 226 engravings. This very useful work has also appeared in Latin and German, translated into the latter by J. BOXBARTH and G. C. BODENNER, Augsburgh, 1706-9, folio. Strutt published, likewise, an edition in Latin and English, London, 1693-1707, folio. Bernard LAMY's book

appeared in 1701, in 8vo. and the ingenious work of S'Gravesande, in 1711, in 8vo. translated into English by Stone, in 1724. Ram. Rampinelli, *Lectiones Opticæ*, Brix. 1760, 4to. with 32 plates.

In Italian:—*Trattato di Prospettiva*, di Bern. Zenale da Trevigi, Milan, 1524, folio. *Prattica della Prospettiva*, di M. Dan Barbaro, Venice, 1559, 1568, 1669, folio, with plates—a very serviceable publication. *Dispareri in materia d'Architettura e di Prospettiva*, Bresc. 1572, 4to. *Le Due Regole della Prospettiva prattica*, di Giac. Barozzi di Vignola, *con i Comment. del* P. Egn. Danti, Rome, 1583, 1611, 1644, fol. Bol. 1682, folio, Venice, 1743, fol. *La Prattica di Prospettiva*, del Car. Lor. Sirigati, Venice, 1596, 1626, folio. *Discorso intorno al Disegno con gl' Inganni del Occhio, Prospett. Prat.* di P. Accolti, Firenza, 1625, folio. *Prospettiva Prattica*, di Bern. Contino, Venice, 1645, 1684, folio. *Paradossi per praticar la Prospettiva, senza saperla*, da Giul. Troili, Bol. 1672, 1683, folio. *Nuova Prattica di Prospettiva*, da Paolo Amato, Pal. 1736, folio. *Trattato Teoretico Prattico di Prospettiva*, di Eust. Zanotti, Bol. 1766, 4to. with engravings. *Della Geometrie e Prospettiva Prattica*, di Bald. Orsini, Rome, 1774, 3 vols. 12mo.

In Dutch:—*Het Perspectiv Conste van* John Friess Vredemann, London, 1559, folio, Amst. 1633, 2 vols. folio. Marolois has given a French translation of this work, entitled *La Perspective, contenant tant la Théorie que la Pratique*, Amst. 1662, fol. *Onderwysinge in der Perspectiv Conste*, door Henr. Hondius, La Hague, 1622, 1647, fol. of which a Latin translation was published at the same place, 1647, folio.

In French:—*Livre de Perspective*, par J. Cousin, Paris, 1560, folio, 1587, 4to. *Leçons de Perspective*, par Jaques André du Cerceau, Paris, 1576, folio. *La Perspective avec la Raison des Ombres et des Miroirs*, par Sal. De Caux, London, 1612, fol. *La Perspective* of Matth. Josse, in Latin and French, Paris, 1635, fol. with 55 plates. *La Perspective Pratique, nécessaire à tous les Peintres, Graveurs, et Architectes*, par un Religieux de la Comp. de Jésus, Paris, 1642, 4to. 1663, 4to. and 1679, 4to. 3 vols.—There have appeared two English translations of this, one by Prike, 1672, 4to.—the other by Chambers, 1726, folio; and a German translation by J. C. Rembold, Augs. 1710, 4to. *Manière Universelle de* Gérard Desargues, *pour pratiquer la Perspective par petit-pied comme géométral; ensemble les Places et Proportions des fortes et foibles Touches, Teintes, ou Couleurs*, par Abr. Bosse, 1648, 2 vols. with 202 engravings. This is one of the most extensive and at the same time important of the works on perspective. It occasioned a great many other writings on the same subject, a detail of which will be found in *Lettres écrites au Sieur Bosse*, 8vo. The same Abraham Bosse has also given a work entitled, *Traité des Pratiques Géométrales et Perspectives*, Paris, 1665, 12mo. with 70 engravings. *Optique de Portraiture et de Peinture*, par François Huret, Paris, 1675, fol. *Traité de la Perspective où sont contenus les Fondemens de la Peinture*, par le P. Bern. Lami, Paris, 1701, 12mo. Amst. 1734, 8vo. An English translation appeared at London in 1702, 12mo. *Perspective Pratique d'Architecture*, par L. Bretetz, Paris, 1706, 1746, 1752, folio. *Traité de la Perspective Pratique, avec des Remarques sur l'Architecture*, par le S. Courtonne, Paris, 1710, 1725, folio. *Perspective Théorique et Pratique*, par M. Ozanam, Paris, 1711, 8vo. *Traité de la Perspective à l'usage des Artistes*, par E. S. Jeaurat, Paris, 1750, 4to. with 110 engravings. *Essai sur la Perspective Pratique*, par Le Roy, Paris, 1757, 12mo. *Raisonnement sur la Perspective pour en faciliter l'usage aux Artistes*, par M. Pizzitot, Parma, 1758, fol. in French and Italian. *Essai sur la Perspective Linéaire et sur les Ombres*, par le Chevalier de Curel, Strasb. 1766, 8vo. *Traité de Perspective Linéaire*, par S. N. Michel, Paris, 1771, 8vo. *La Perspective Aérienne soumise à des Principes puisés dans la Nature, ou Nouveau Traité du Clair-obscur et de Chromatique, à l'usage des Artistes*, par M. de St. Morien, Paris, 1789, 8vo. *Elémens de Perspective Pratique, à l'usage des Artistes*, par Valenciennes, Paris, 4to. Lavit, *Perspective Linéaire*.

In English:—*Practical Perspective made Easy*, by Mason, 1670, folio. *Architectural Perspective*, by Peake, fol. *Perspective made Easy*, by W. Halfpenny, 1731, 4to. *Stereography, or a Complete Body of Perspective, in all its Branches*, by J. Hamilton, London, 1738, 1749, fol. with 130 engravings. Humphry Ditton's book, 1712, folio. *Two Treatises*, by Brook Taylor, one in 1715, the other in 1719. Oakley's *Magazine of Architecture, Perspective, and Sculpture*, 1730, folio. *Perspective made Easy in Theory and Practice*, by J. Kirby, London, 1755, 1768, 4to. *Perspective of Architecture*, deduced from the principles of Brook Taylor, and performed by two rules only of universal application, by the same, London, 1755, 1761, 2 vols. folio. *The Art of drawing in Perspective made*

easy to those who have no previous Knowledge of Mathematics, by J. Ferguson, Lond. 1755, 1778, 8vo. *Practice of Perspective*, by J. Highmore, 1784, 4to. *Theory of Perspective in a Method entirely new*, by J. L. Cowley, London, 1766, 2 vols. 4to. *Familiar Introduction to the Theory and Practice of Perspective*, by J. Priestley, Lond. 1770, 8vo. *The Elements of Linear Perspective demonstrated by geometrical Principles*, by Edw. Noble, London, 1771, 8vo. *A Complete Treatise on Perspective, in Theory and Practice, on the Principles of Dr. Brook Taylor*, by T. Malton, Lond. 1776, folio. Ware's *Complete Body of Architecture* contains *a Treatise on Perspective*, 1760, fol. A thin 4to. without the author's name, entitled *A New Treatise on Perspective, founded on the simplest Principles, containing universal Rules for Drawing the Representation of any object on a vertical Plane*, 1810. The work of D. Cresswell, A.M. 1811, 8vo. Milne, in his *Elements of Architecture*, 1812, 4to., and Mr. Hayter's work, 1813, 8vo. Besides the above authors and treatises, are Martin, Muller, and Emerson, all of whom have written treatises in their mathematical courses.

Works on this subject, under the following denominations, have appeared in the German language:—*Of Perspective, as it regards the Arts*, 1509, fol. with 37 woodcuts. Gualt. Henr. Rivius, *New Perspective; or, The True Foundation of the Arts of Design*, Nuremberg, 1547, fol. John Lautensak, *Instructions on the Use of the Compass and Rule, particularly in Perspective*, Franckf. 1567, fol. *Perspectivum Corporum Regularium*, &c. par Jamitzer, Nuremberg, 1564, fol. Lud. Bruns, *Practice of Perspective*, &c. Leipsic, 1615, folio. Lenkart, *Treatise on Perspective*, Augs. 1616, folio. Alberti, *On Perspective and Shading*, Nürnb. 1623-7, fol. Schubler, *Instructions on Perspective*, &c. Nürnb. 1719-20, 2 vols. fol. with 50 engravings. *Lucidum Prospectivæ Speculum*, by P. Heinecken, Augs. 1727, fol. with 93 engravings. *Ibid.* 1753, fol. with 126 engravings. *Summary Instructions on Perspective*, by John Christopher Bischof, Halle, 1741, 8vo. *Instructions on the Manner of tracing all Elevations in Perspective, without having regard to a Plan*, by J. H. Lambert, Zurich, 1759, 8vo. and 1774, 8vo. A French translation appeared in 1759, 8vo. *Manner of learning to draw by means of Geometry and Perspective*, by Werner, Erfort, 1764, 8vo. *Detailed Instructions on Perspective, after an easy and clear Method*, by C. Phil. Jacobz, Amst. 1767, 8vo. with 60 plates. *Treatise on Perspective*, by Luc. Voch, Augs. 1780, 8vo. *Elements of Perspective for the use of Painters*, by Burja, Berlin, 1793, 8vo.

The reader may also turn with advantage to *Leçons de Perspective*, par L. Le Bicheur. Ludovico Cigoli, *On Perspective. Perspectiva Practica*, by Franc. De Breuil. The work of Albert Durer on *The Proportions of the Human Body*, Nürnberg, 1528, fol. The second book of the *Architettura* of Seb. Serlio, Paris, 1545, fol. The fifth book of *Trattato dell' Arte della Pittura*, of Lomazzo, Milan, 1585, 4to. *Museo Pittorico*, by Velasco, Madrid, 1715, fol. *Remarques sur les Tableaux en jeu d'Optique*, in the French Mercury for the year 1763: and indeed observations on the subject may be found in almost all those works the object of which is to convey instructions on the art of Drawing, of Painting, or of Architecture. See those words.

Peter and Paul. [*In painting.*] Such is called the portrait which Nicephorus has left us of these two great pillars of the primeval Christian church. St. Peter is represented as having a well proportioned figure, a complexion very pale, indeed almost white; the hair and beard frizzled and short; the eyes spotted with blood; the eyebrows arched; the nose long, not however pointed, but a little flattened at the extremity.

St. Paul is depicted as short and little, and even a trifle crooked. The forepart of his head is bald; the eyebrows low; the eyes sharp and sparkling; the nose bent back; the beard bushy, gray like the hair, and tolerably long. It would not be judicious to place too much confidence in the fidelity of these details, which are to be found only in Nicephorus's picture, and differ in some respects from descriptions in works both ancient and modern. Nevertheless, the traditional account of these holy personages was no doubt attended to by the artist, and we think some stress may fairly be laid on the truth of the representation, which it is certainly interesting to become acquainted with.

On those ancient monuments which remain to us we find St. Peter and St. Paul often clothed with a kind of mantle closed at the breast with a clasp, adorned by a gem, or something bearing that shape, and occasionally itself covered with a tunic having long and wide sleeves. Upon all the relics published by Buonarroti in his *Osservazioni sopra Framm. di Vetro* (pl. 10—16) and by Boldetti in his *Osservazioni sopra i Cimiteri* (liv. 1, chap. xxxix.), the two apostles are found by the side of each other; and there is often seen near them a crown (the attribute of martyrdom) and a monogram of Christ.

In Boldetti (pl. 200, No. 14), St. Peter is represented under the figure of Moses, in the attitude of striking the stone or rock with his wand.

PHALANGÆ. [Gr. φαλαγζ, from πάλλω, to strike or revolve.] *In archaiology.* This, together with *Scutulæ*, was the name given by Vitruvius, to rollers, or wooden cylinders which served to transport from one place to another immense burdens, occasionally even ships or large barges.

PHALOS. [Gr. φαλὸς, bright, from φαω, to shine.] *In archaiology.* One of the terms applied to the ornaments placed at the summit of the casque of ancient warriors, which at the same time served to inspire the breast of the enemy with terror. The crest by which the casque was surmounted bore sometimes the mane of a horse flowing between two great horns or two feathers. Thus is the casque of Minerva adorned upon a beautiful vase representing the expiation of Orestes, and published by Millin in the first vol. of his *Monumens Inédits;* and another, exactly similar, appears upon one of the *lapithæ*, who is combating a centaur on a vase in the first vol. of the collection of Hamilton published by Tischbein. The Latin words *crista* and *juba*, and the Greek λοφὸς, have been applied to ornaments of this description.

PHALLUS. [Gr. φαλλὸς.] *In archaiology. Simulachrum ligneum membri virilis.* The institution of the phallus originated thus. After the murder of Osiris, Isis was unable to recover, amongst the other fragments of his body, the privities of her husband; as therefore she had determined to pay all possible respect to his remains, she distinguished that part which was lost with more than usual honour and attention. Its representation was formed in wood, and borne with solemnity during the sacred festivals which were instituted in memory of Osiris. The ancients held it in the greatest veneration, and never were known to mix up therewith any impure or lascivious thought or allusion. It was regarded simply as the emblem of fecundity, and these festivals were adopted from the Egyptians by the Greeks, and introduced into Europe by the Athenians, who made the procession of the *phallus*, part of the celebration of the Dionysia of the god of wine. They who carried the phallus, at the extremity of a long pole, were denominated *phallophori*. They generally appeared among the Greeks besmeared with the dregs of wine, covered with skins of lambs, and wearing on their heads an ivy crown. **Plut. de Isid. et Osir.—Paus. 1, c. 2.—Lucian de Deâ Syr.**

Among the Hindoos, a similar emblem called *lingam* is used at this day, and with similar reverence.

PHAROS. [Gr. φῶς, light, and ὁράω, to see.] *In archaiology.* A lighthouse or pile constructed either of masonry or wood work and erected near the entrance of a seaport or on any dangerous spot, to serve, from the fire constantly kept burning therein through the night, as a guide and warning to vessels in the vicinity.

This name was derived from the existence of a most celebrated lighthouse, once reckoned even amongst the wonders of the world, and which was built by order of Ptolemy Philadelphus on the island so called, adjoining to the continent of Europe over against Alexandria. It was a cognominal tower of four sides, each side a stadium in length, and was so high as to be visible a hundred miles off. It has been affirmed that each of its four corners rested on a sea-crab of glass, or of hard transparent stone of Æthiopia or Memphis. Others imagine, with greater probability, that the crabs were only added externally to the base by way of ornament, or as emblematical of its situation and use. Sostrates the Cnidian was, according to an inscription on the tower, the architect employed to erect it by Ptolemy Philadelphus, who is said to have expended eight hundred *talents* in the work. This most magnificent tower consisted of several stories and galleries, with a lantern at top, in which a light being continually burning might be seen for many leagues at sea and along the coast. The several stories were adorned with columns, balustrades, galleries of the finest marble and workmanship; to which some ancient writers add, that the architect had contrived to fasten some looking-glasses so dexterously along the highest galleries, that all the ships which were sailing on the sea, including a considerable distance, might be descried therein.

If we may credit Arabian authors, this edifice was originally a thousand cubits high. The commotions occasioned by earthquakes reduced it to less than four hundred cubits (about six hundred and sixty feet). The Grecian kings who succeeded Alexander in Ægypt, at different times repaired it. Nothing however now remains of this once splendid structure, the traveller only finding, instead, a kind of irregular castle, without ditches, or outworks of any strength; and out of the middle of this clumsy building rises a tower which serves for a lighthouse, but retains not one vestige of the beauty and grandeur of the old one.

The colossus of Rhodes also served as a pharos. See LIGHTHOUSE.

PHATNOMATA. [Gr. φατνωματα.] *In archaiology.* Name applied by the Greeks to arched or vaulted cielings.

PHENGITES. [Gr. φελτος, brightness.] *In architecture, statuary,* &c. This firm and brilliant marble was discovered in Cappadocia in the age of Nero, and is still to be found there: there are also specimens to be met with both in Germany and France; and, among ourselves, in Derbyshire and some other counties. According to Pliny, one of its properties, namely, transparence, caused it to be frequently used among the ancients in the construction of windows. It bears the semblance of a rude irregular mass, very shattery and friable, but of a brightness excelling that of most other marbles, and perfectly surpassing them in the quality before alluded to. The colour is a rich somewhat yellowish white, or pale straw colour; the yellowness is more deeply marked in some places than others, producing a kind of cloudy or in some instances veiny appearance. It is extremely weak and brittle in the mass; and when broken into small pieces, may be readily crumbled between the fingers into loose flakes of an angular appearance, some perfectly so, others complex, irregular, or mutilated, and all making approaches to a flat shape.

The ancients were extremely attached to the use of this species of marble in their public buildings. It was employed in the construction of Nero's golden house; and the temple of Fortune, so long and so justly celebrated, was entirely built of it. Its distinguishing beauty is unquestionably its transparency; from which alone this temple was quite light when the doors were shut, although it was built without a window and had no other light than was transmitted through the stone its walls were built with. Domitian, who, towards the end of his life, became extremely suspicious and mistrustful of all about him, had a porch or portico, in which he was in the constant habit of promenading, enclosed with phengites, in order that he might be enabled to perceive whatever was passing withoutside. Pliny says that it was customary likewise to construct bee-hives of this material for the purpose of overlooking the work of the bees.

PHILOSOPHERS. [id quod *Philosophy.*] *In sculpture,* &c. This name is given sometimes to the statues or busts of ancient philosophers which are distinguished by having no other vestment than a mantle without tunic, while the chest remains uncovered. The busts of Zeno, of Emarchus, and of Epicurus, found at Herculaneum, and engraved in the first vol. of Bronzes, will afford us an idea of the manner in which they were depicted.

PHILOSOPHY. [φιλος or φιλια, desire or study, σοφια, wisdom, Gr.] *In allegorical painting and sculpture.* See MORAL PHILOSOPHY.

PHOCICUM. *In architecture.* Name of an edifice in which were held assemblies of the deputies from all the Phocæan towns. It was situated near the city of Daulis in Phocis. Pausanias gives a description of this building in the 5th chapter of his 10th book. It was a vast structure, the two long sides of which were ornamented interiorly with porticoes, which served to support the roof as well as to embellish the building. Under these porticoes were benches elevated a little above the level of the floor, and destined for the accommodation of the deputies. The side immediately fronting the entrance was adorned with statues of Jupiter, Juno, and Minerva; the former seated on his throne, the two latter each on one side him.

PHŒNICIANS. [Gr. either from Phœnix, one of their kings, or from φοϊνιξ, a palm-tree.] *In the history of the arts.* The Phœnicians were one of the most politic and most industrious of the nations of antiquity. We know that almost all the arts flourished among them, as may be evidenced by the celebrity of Tyre and Sidon, two of their cities. The glass of Sidon, the purple of Tyre, and the exceeding fine linen they wove, were the products of their own country and their own invention; and for their extraordinary skill in working metals, as well as in hewing timber and stone —in a word, for their thorough knowledge of what was solid, great, and ornamental in architecture—we need only put the reader in mind of the large share they had in erecting the temple of Jerusalem under their king Hiram. Their fame indeed for taste, design, and ingenious invention was such, that whatever was elegant, great, or pleasing, whether in apparel, vessels, or toys, was distinguished, by way of excellence, with the epithet of *Sidonian.*

Carthage was another of their principal cities, the temples of which were enriched with statues of gold, as was the case with that of Apollo. Titus Livius makes mention of a shield of solid silver weighing one hundred and thirty pounds, on which was wrought the portrait of Asdrubal, the brother of Hannibal. The Carthaginians, Phœnicians by origin, were often domesticated at Rome for the purpose of exe-

cuting for the Romans various ingenious performances in wood.

PHŒNICIAN ARCHITECTURE. See ARCHITECTURE.

PHŒNIX. [id quod *Phœnicians.*] *In emblematical painting and sculpture.* A bird famous in antiquity, but generally considered by the moderns as being fabulous. The ancients speak of this bird as unique, and their artists represent it as of the size of an eagle, its head finely crested with a beautiful plumage, its neck covered with feathers of a golden colour, and the rest of it purple, with the exception of the tail, which is white. The eyes are extremely sparkling, like stars. The tradition is, that it lives five hundred or six hundred years in the wilderness; and when thus advanced in age, builds itself a pile of sweet wood and aromatic gums, and firing it with the wafting of its wings, thus destroys itself; while from its ashes arises a worm which, in time, grows up to be a phœnix. Hence, perhaps, the word φοῖνιξ, has been applied to the palm tree, inasmuch as, when burnt down to the root, it rises again fairer than ever.

In the sixth book of the Annals of Tacitus (sect. 28), it is stated, that in the year 787 of Rome, the phœnix revisited Egypt, which created much speculation among the learned. The accounts of the longevity of this creature vary from five hundred to one thousand five hundred years. It was considered as sacred to the sun.

Tradition has assigned the several eras at which the phœnix appeared. The first, it informs us, was in the reign of Sesostris; the second in that of Amasis; and the third at that period when Ptolemy (the third of the Macedonian race) was seated on the throne of Egypt. When to these circumstances are added the brilliant appearance of the phœnix, and the tale that it makes frequent excursions with a load on its back, and that when, by having made the experiment through a long tract of air, gaining sufficient confidence in its own vigour, it flies with the body of its progenitor to the altar of the sun, in order that it may be there consumed, some key will be afforded to the frequent use made by artists of this curious subject, as also to the idea which has been put forth by antiquarians, that the sages of Egypt enveloped under this allegory the philosophy of comets.

PHRYCTORION. [Gr. φρυκτώριον, a firebrand to mark the arrival of an enemy, from φρυγω, to fry.] *In archaiology.* Name of those towers upon which were stationed sentinels among the Greeks to give notice of the approach of an hostile force by means of fire and flame. They had also an instrument employed in the theatres similarly denominated and applied to the same purpose.

PHRYGIA. [Gr. Φρύγιος, parched, or rather perhaps corrupted from Brygium, the name of a country in Macedonia, whose inhabitants migrating to another place, gave its name to their new settlement.] *In ancient costume.* This people were in the habit of wearing a peculiar kind of bonnet or cap, which distinguished them from other barbarous nations. This cap, with which Paris and the Trojans were generally invested, was conical, and its point fell forward on the summit of the head. The Phrygian bonnet is a well known term, and it is presented to artists on several antique monuments. The beautiful statue of Paris, in the Louvre, is altogether equipped in the Phrygian manner, and wears this particular kind of cap. It appears that they wore the tunic with long sleeves, and even the *pallium.* A casque of leather furnished with a tuft of plaited hair, small shields, pikes of ordinary length, darts, and poniards, seem to have formed, according to Herodotus, the armour of the Phrygians.

PHRYGIAN MARBLE, called likewise Synnadique, was either white or red. The latter of these names was adopted from the town of Synnas, in Phrygia. They extracted at first only small blocks of this species of marble; but in the time of Strabo the Romans drew forth entire columns, which, being carried towards the sea, were transported in ships. Pliny cites the basilica of Paulus among the most beautiful of structures, and it was remarkable for its column of marble from Phrygia. According to the testimony of Sidonius Apollodorus this marble was white; while Claudian describes it as having red spots of a round or oval shape. Statius confirms this, and in a mythological vein attributes the sanguine spots to the blood of the wretched Atys. The *Docimenian* marble, so called from Docimium, a Phrygian town, was also white and red.

PHRYGIAN STONE. A substance described by the ancients, and employed by them in the process of dyeing; perhaps from some vitriolic aluminous salt contained therein, which served to enliven or fix the colours used by the dyers. It was light and spongy, resembling a pumice-stone; and the whitest and lightest kinds were esteemed most highly. Pliny gives an account of the method of preparing it.

PHYSIOGNOMY. [φυσις, nature, and γινώσκω, to know.] *In painting and sculpture.* The ancients appear to have believed that the faculty of judging the characters of men from the conformation of their feature was capable of being reduced into an actual science. The formation of the forehead, the nose, the mouth, the greater or less distention of the eyes and eyebrows, even the disposition of the hair, have all been held indicative, in a greater or less degree, of the constitutional tendencies of the individual. We have already, in the article PASSIONS (which word see), made some observations on the different effects of circumstance and feeling on the "human face divine." But those characteristic expressions were, as their causes, transitory and fleeting; whereas those we now consider are fixed and indelible. It will appear obvious, however, that those features which are insusceptible of modulation must be the least important in physiognomy; although the followers of the art tell us that all the parts enumerated above are equally definite in marking character. Lavater's well known work is very explicit on this subject; and a careful perusal of it cannot fail to be advantageous to the artist; for notwithstanding the probable deficiencies of and exceptions to this science, it is desirable that he should invest the personages whom he introduces into his composition with that cast and expression of features most generally tallying with their received characters. Thus, in real life, a man, very possibly, may have lowering eyebrows and a frank heart; but a painter will not, nevertheless, give half-closed eyes to a figure in which he means to exhibit a person of a frank disposition. An elongated face, approaching to the formation of a sheep's head, infallibly communicates a stupid air to the countenance:—such a face may, perchance, belong to a man of wit, but the painter will take care, in representing such a one, religiously to avoid such a peculiarity. We know perfectly well that there have been many heroes (and, at least, one great hero now living), the contour of whose features is mean and unintellectual; yet the painter would be justly reprehensible if he should give such a shabby expression to the face of his hero, unless, indeed, he were making a portrait. No artist more profoundly studied, or more thoroughly understood, variety of expression, than Raffaelle.

The aid of Lavater is not necessary to inform us that there exists a national physiognomy by which a stranger in any given country may be known by those who are not possessed of previous information to be a Spaniard, a German, or a Frenchman, and which impels even the vulgar to exclaim —"He is a foreigner," though their skill does not avail to appropriate him to his country.

The most unequivocal proofs exist of family physiognomy, or, in other words, family resemblance. Buffon, Bonnet, Haller, and many others, have endeavoured to account for this circumstance, but, as may be supposed, without any very decided success. After all, it must be confessed, that this science (if such it can fairly be denominated) must be precarious, and in some respects delusive. It cannot, however, be doubted, that there is an apparent correspondence between the face and the mind: the features and lineaments of the one are directed by the motions and affections of the other:—there is, perhaps, even a peculiar arrangement of the members of the face, and a peculiar disposition of the countenance, to each particular affection of the mind.

Jacques SPON has published a dissertation, in French, on the physiognomy of the different Roman emperors. It is entitled, *Dissertation de l'Utilité des Médailles pour l'étude de la Physionomie;* which HEUSINGER has reprinted at the 231st and following pages of his edition of the Cæsars of Julian; and there is also a Latin translation of the same. The most considerable and the most interesting work on the subject of physiognomy is, without doubt, that of the celebrated LAVATER, already alluded to.

PHYSIOGNOTRACE. [id quod *physiognomy* and the word *trace.*] Name given by M. Chrétien to a species of pantograph which he placed vertically, and by means of which he took, in the short period of two minutes, a portrait after nature of the most infallible description. This portrait might afterwards be reduced, by means of the horizontal pantograph, and engraved of any size that was preferred.

PIAZZA. [Italian.] *In architecture.* A continued archway, or vaulting, supported by pillars, under which to promenade.

PICTURESQUE. [Lat. *pictura*, from *pingo*, to paint.] "Picturesque beauty," says a late writer on that subject, "refers to such beautiful objects as are suited to the pencil." This term, although principally appropriated to the works of nature, is not misplaced with reference to many of the performances of art. Those objects best merit the appellation (of the former class) which are distributed by the hand of na-

ture with a mixture of grandeur, simplicity, and varied rudeness. A neat ordinary looking garden, for instance, although a cheerful and agreeable object, abstractedly considered, yet displays too great a proportion of uniformity, of laying out, of *design*, to be fairly characterized as picturesque. "The ideas of *neat* and *smooth*," observes Mr. Gilpin, "instead of being picturesque, in fact, disqualify the object in which they reside from any pretensions to picturesque beauty. Nay, farther, we do not scruple to assert that roughness forms the most essential point of difference between the beautiful and the picturesque: as it appears to be that particular quality which makes objects chiefly pleasing in painting. I use the general term *roughness;* but, properly speaking, roughness relates only to the surface of bodies; when we speak of their delineation we use the term *ruggedness*. Both ideas, however, equally enter into the picturesque, and both are observable in the smaller as well as in the larger parts of nature; in the outline and bark of a tree, as in the rude summit and craggy sides of a mountain.

"Let us then examine our theory by an appeal to experience, and try how far these qualities enter into the idea of picturesque beauty, and how far they mark that difference among objects which is the ground of our inquiry.

"A piece of Palladian architecture may be elegant in the last degree; the proportion of its parts, the propriety of its ornaments, and the symmetry of the whole, may be highly pleasing: but if we introduce it into a picture, it immediately becomes a formal object, and ceases to please. Should we wish to give it picturesque beauty, we must use the mallet instead of the chisel: we must beat down one half of it, deface the other, and throw the mutilated members around in heaps; in short, from a smooth building we must turn it into a rough ruin. No painter who had the choice of the two objects would hesitate a moment.

"Again, why does an elegant piece of garden ground make no figure on canvass? —The shape is pleasing, the combination of the objects harmonious, and the winding of the walk in the very line of beauty. All this is true; but the smoothness of the whole, though right and as it should be in nature, offends in picture. Turn the lawn into a piece of broken ground, plant rugged oaks instead of flowering shrubs, break the edges of the walk, give it the rudeness of a road, mark it with wheel tracks, and scatter around a few stones and brushwood; in a word, instead of making the whole smooth, make it rough, and you make it also picturesque. All the other ingredients of beauty it already possessed."

Picturesque composition may be defined, to speak generally, as the art of uniting, in one whole, a variety of parts, which parts may be sought and found among the works of art (though in a far less proportion), as well as in the works of nature. Objects may likewise be *made* picturesque: this, however, is hazardous work, and there is no small danger of missing the picturesque and falling into the ridiculous. *Artificial ruins*, for example, can seldom be regarded as matters of good taste: and when the trick is known, the eye, or rather the imagination, through the medium of the eye, refuses to recognise therein any of the principles of romantic beauty sought to be imparted. The great source of picturesque beauty is Nature in all her original variety and irregular grandeur. "We seek it," says the ingenious authority quoted above, "among all the ingredients of landscape,—trees, rocks, broken grounds, woods, rivers, lakes, plains, valleys, mountains, and distances. These objects, in themselves, produce infinite variety; no two rocks or trees are exactly the same; they are varied a second time by combination; and almost as much a third time by different lights and shades, and other aerial effects. Sometimes we find among them the exhibition of a whole, but oftener we find only beautiful parts."

Grandeur or sublimity, unassisted, cannot elevate an object to the character of picturesque; however grand the mountain or rock may be, it has no claim to this epithet, unless its form, its colour, or its accompaniments have some degree of beauty. Nothing can be more sublime than the ocean; but, wholly unaccompanied, it has little of the picturesque. When we talk, therefore, of a sublime object, we always understand that it is also beautiful; and we call it sublime or beautiful only as the ideas of sublimity or simple beauty prevail. But it is not only the form and the composition of the objects of landscape which the picturesque eye examines: it connects them with the atmosphere; and seeks for all those various effects which are produced from that vast and wonderful storehouse of nature. Nor is there, in travelling, a greater pleasure, than when a scene of grandeur bursts unexpectedly on the eye accompanied with some accidental circumstance of the at-

mosphere which harmonizes with it and gives it double value.

Few are the places so barren and destitute as to afford nothing from which materials may be extracted by the lover of the picturesque.

——— Believe the Muse,
She does not know that inauspicious spot
Where beauty is thus niggard of her store:
Believe the Muse, through this terrestrial waste
The seeds of grace are sown, profusely sown,
Even where we least may hope.

The great military road between Carlisle and Newcastle is, perhaps, the most barren tract of country in England: yet even here, says Gilpin, "there is always something to amuse the eye. The interchangeable patches of heath and greensward make an agreeable variety. Often, too, on these vast tracts of intersecting grounds, we see beautiful lights softening off along the sides of hills; and often we see them adorned with cattle, flocks of sheep, heathcocks, grouse, plover, and flights of other wild fowl. A group of cattle standing in the shade on the edge of a dark hill, and relieved by a lighter distance beyond them, will often make a complete picture, without any other accompaniment. In many other situations, also, we find them wonderfully pleasing, and capable of making pictures amidst all the deficiencies of landscape. Even a winding road itself is an object of beauty; while the richness of the heath on either side, with the little hillocks and crumbling earth, give many an excellent lesson for a foreground. When we have no opportunity of examining the grand scenery of nature, we have, at least, every where the means of observing with what a multiplicity of parts, and yet with what a general simplicity, she covers every surface.

"But if we let the imagination loose, even scenes like these administer great amusement. The imagination can plant hills, can form rivers and lakes in valleys, can build castles and abbeys, and, if it find no other amusement, can dilate itself in vast ideas of space."

Pier. [*pierre*, stone, Fr.] *In architecture.* A mass of stone, &c. opposed, by way of fortress, to the force of the sea, or a great river, for the security of ships that lie at anchor in any haven.

Piers of a Bridge. See Bridge.

Piety. [Lat. *pietas.*] *In allegorical painting and sculpture.* Pietas, as the goddess of devotion, is represented as veiled, and casting incense on an altar. The Romans, in their solemn devotions, covered their heads with a long veil.—Ovid, Fast. l. iii. v. 364. Lucr. v. v. 1198.—The vestal virgins were, therefore, always veiled.

The poets speak of the severe face and modest air of this goddess, describing her as dressed in white, the colour of innocence, and therefore most proper for devotion. She is also represented as productive of the good and virtuous offices of life. Thus, instead of an altar, she has sometimes the attribute of a stork; and then signifies the duty of children towards their parents, or the affectionate behaviour of parents to their children. There are figures of her with one, two, and sometimes three children before her, like our figures of Charity.

Pigeon. [Fr.] *In emblematical painting and sculpture.* The ancient Assyrians are said to have considered the pigeon as the symbol of their country, and to have persisted in refusing to eat it, suffering these birds to go at large in flocks, and having the representation of them wrought upon their garments.

Of all birds the pigeon is the one most frequently found depicted upon ancient ecclesiastical monuments. There is one sublime allegory which this practice may be intended to shadow forth, to which we will do no more in this place than allude: but the pigeon, or dove, was likewise, among the primitive Christians, a symbol of martyrdom, and is thus meant when found upon their tombs bearing in its beak a crown or palm-garland. It was sometimes, when represented on the wing, understood to typify the escape of the soul from the body; and has at all times been regarded as emblematical of repose and peace.

The reader may consult Boldetti, who has, on this subject, published, in his *Osservazioni sopra i Cimeteri*, several antique monuments. Buonarroti reports that, in the first ages of the church, they preserved the eucharistic bread in a vase shaped like a dove; and that the same form was likewise given to the lamps burnt on certain occasions upon the tombs of the saints.

Pigment. [*pigmentum*, Lat.] *In painting.* Preparations used by painters to impart colour to bodies, or to imitate particular colours. (See Painting.) They are extracted from animal, vegetable, or mineral substances.

Pigmy. [Gr. πυγμαῖος, from πυγμή, a cubit.] *In the mythology of art.* A little nation of Ethiopia fabled to have been devoured by the cranes (see Crane); and

thence any thing of mean or inconsiderable dimensions has been denominated pigmy.

PILA. [Lat. from πιλω, Gr. compressed wool.] *In archaiology.* A little image of a man made of wool, and sacrificed by the ancients to the household gods, or *lares*, in the fêtes instituted in honour of those inferior deities by Servius, and styled *compitales.* Macrobius states that actual infants were originally offered up for this purpose; but on the expulsion of the kings from Rome that barbarous custom was abolished, and the *pila* substituted in place of the child.

This appellation was likewise given to a figure made of straw, which they presented to the bulls in the amphitheatre for the purpose of exciting them; as also to a species of standard upon which were represented several shields piled upon one another. Titus Livius calls the pillar in the forum, from which Horace had suspended the spoils of the Curiatii, *Pila Horatia.*

PILASTER. [*pilastre*, Fr.] *In architecture.* A square pillar or column, usually placed against a wall, and projecting not more than one-fifth or one-sixth of its thickness. It has the same proportions and ornaments as a column, varying according to the different orders of architecture, but no diminution. The pilasters in a building should be of the same order as the columns, if any of the latter are used.

It would be incorrect to attribute the invention of pilasters to mere imitation of the column, inasmuch as the motive for their use is chiefly to give strength to the building, and the desire to render these props ornamental occasioned the ancient architects to apply to them the graces of adornment and proportion. See AULA, ARCHITECTURE.

PILE. [Gr. πιλοω, to press or squeeze, in allusion to the different pieces of stone wedged together; *pyle*, Dutch.] *In architecture.* Generally speaking, any mass of building. A large stake rammed into the ground at the bottom of rivers, or in marshy land, as a foundation to build on.

Pile Engine, a very curious machine, invented by Mr. Vauloue, for driving the piles of Westminster Bridge. A new machine for similar purposes has been invented by Mr. S. Bunce. It will drive a greater number of piles than any previously used, and can be constructed to work more simply by horses than the former one mentioned.

The *Funeral Pile*, among the Greeks and Romans, was a pyramid built of wood, whereon were laid the bodies of the deceased, to be burnt. It was partly in the shape of an altar, and differed in height according to the rank of the party destined to be consumed. Probably it might originally have been considered as an altar on which the dead were consumed as burnt offerings to the infernal deities. The trees made use of in the construction of a funeral pile were such as abounded in pitch and resin, as being most combustible. If any other wood was employed, it was split, the more readily to take fire.

PILEUS. [Lat. from πιλιδιον, Gr. a hair-cap.] *In the archaiology of costume.* A hat, cap, or bonnet to cover the head. Plaut. Stat. The Roman *pileus* was not much unlike our nightcap, or rather, our seaman's cap. On several ancient Greek vases, we find sundry heroes of antiquity invested with the πιλιδιον, and more especially the figures of Ulysses, perhaps by way of indicating his long and frequent voyages. According to Eustathius it was Apollodorus, the master of Zeuxis, who first decorated Ulysses thus.

The Romans, at the commencement of the republic, were much in the habit of going about with the head uncovered, or covered but with a piece of their vestment; they wore the *pileus* only during public games, at the time of the *saturnalia*, or in voyages. It was likewise used as an emblem of liberty: and in this sense was applied to slaves about to be enfranchised. *Servum ad Pileum vocare* (Livy), was to give him his freedom, which they did by first shaving his head, then putting a cap upon it.

Pileus Thessalicus. A broad-brimmed bonnet for the purpose of shielding the wearer either from sun or rain. It took its name from the Thessalonians, who first adopted it.

Pileus Pannonicus was a sort of military bonnet made of skin.

PILGRIM. [*pelgrim*, Dutch.] *In painting and architecture.* According to Boldetti, the pilgrims of the early ages bore, on their return from Jerusalem, a branch of palm. In the middle of the hill of Sion was a cemetery destined for the reception of the bodies of all such as died in pilgrimage. The Empress St. Helena caused subsequently a sort of vaulted sepulchre to be constructed, sufficiently large, and penetrated by seven openings, or doors, by which those engaged in the funeral ceremonies entered with the corpse. No vestiges of this sepulchre remain.

PILLAR. [*pilar*, Spanish, *pilier*, Fr.] *In architecture.* This word is generally used as synonymous with *column;* though, in strict fact, they are different. The pillar may indeed be regarded as the prototype or forerunner of the column, and is accordingly of plainer and more unassuming appearance, and generally of stouter proportions. The supporters in Gothic architecture are pillars, but can never properly be termed columns, from which they vary both in shape and every particular.

As the pillar is rarely used for ornament so much as for strength, no rules have been laid down by architects whereby to regulate its proportions; in this respect, therefore, the artist must be guided by his own judgment, to be exercised with reference to the general dimensions of the building in which his pillars are employed. They have generally a sort of foot, or base, and a cornice above, on which the superincumbent weight rests. There is something not inelegant in the cluster-pillar found in Gothic cathedrals, which seems to possess the principle of multiplying itself, and, while each constituent part preserves its own little section of a capital and pedestal, is bound together by a common cornice and base.

In archaiology, pillars are large single stones set up perpendicularly. Those of them which have been discovered in this country were doubtless the work of the Druids; but these being the most simple of all monuments, it cannot be disputed that their use is more ancient even than Druidism itself. They were placed as memorials in testimony of different events: such, for instance, as remarkable examples of God's mercies, contracts, singular victories, boundaries, and sometimes sepulchres. (See INSCRIPTION, MONUMENT). They were occasionally also marks of execration and magical talismans, as likewise warning memorials indicative of the danger of any particular spot.

These stones, from having been long regarded as objects of veneration, were ultimately even idolatrously worshiped by the votaries of superstition and ignorance: wherefore, after the introduction of Christianity, some had crosses cut thereon, which was considered as snatching them from the service of the devil.

At the magnificent mansion of the Earl of Pembroke, at Wilton, near Salisbury, is a pillar formed of one piece of white Egyptian granite, brought from the temple of *Venus Genetrix* at Rome, near fourteen feet high, and twenty-two inches diameter, with an inscription to Astarte or Venus.

PINACIA. [Gr. πίναξ, a board, picture, or dish.] *In archaiology.* Name given by the Greeks to those little tablets called by the Romans *pugillares.* The statue of Calliope, in the Louvre, presented in the 27th plate of the first volume of the *Musée* of Pius Clementinus, holds similar tablets.

Pinacia was also the term applied to those minute plates of copper on which were inscribed the names of all those persons duly qualified from every tribe or *caste* who aspired to be members of the areopagus. These plates of copper were thrown into a large vase, and into another a like number of beans, of which one hundred were white, and all the rest black. The names of the candidates were drawn forth, one by one, together with a bean; and those whose names were produced correspondently with the white beans were admitted into the areopagus. See AREOPAGUS.

PINACOTHECA. [πίναξ, a picture, and τίθημι, to put.] *In archaiology*, signified what we denominate a cabinet or gallery of paintings, and in this sense it is employed by Vitruvius. That author, in speaking of the different divisions and chambers of a house, assigns to each its due proportions with the exception of the *pinacotheca*, respecting which he only says, that it should be spacious, and, if possible, on the north side, because it being desirable to give this apartment a light always equal, that end could not be attained so well from any other aspect.

PINE TREE. [Gr. πίνος.] *In painting, sculpture, and architecture.* This tree, the leaves of which are straight, filamentous, and very long, garnished at their base with a sheath, from which five or six leaves issue, was well known to the ancients, and employed by the Greeks, who decorated their Pans, Bacchanals, &c. with its leaves. The Romans used rather vine or ivy leaves for this purpose, and their example has been followed by the moderns. On several *bassi rilievi* the pine tree appears growing near the figures of Cybele and Atys. The species of pine called *pinus cedrus* was much used in building and statuary. (See CEDAR). Solomon's temple and palace were both of this wood. Cortes, the conqueror of Mexico, is reported to have built a palace there, in which were seven thousand beams of cedar, most of them one hundred and twenty

feet in length, and twelve in circumference, as we are told by Herrera.

The statue (says Hanbury) of the great goddess at Ephesus was made of this material; and if this tree abounded with us, it might have a principal share in the construction of our most superb edifices. The effluvia constantly emitted from its wood are said to purify the air and make rooms wholesome. Chapels, and places set apart for religious duties, being wainscoted with this wood, inspire the worshippers with a more solemn awe. It is not obnoxious to worms; and emits an oil which will preserve cloth or books from worms or corruption. The sawdust will preserve human bodies from putrefaction; and is therefore said to be plentifully used in embalming, where those rites are practised.

PINNACLE. [Lat. *pinnaculum*, from *pinnus* (now obsolete), pointed.] *In architecture.* The top or roof of a house terminating in a point. This is most frequently used in Gothic architecture, and among the ancients was attached to their temples and other public buildings, but rarely to private houses. See FINIAL.

PINTADA. [Fr. *peintade*, from the Latin word *pingo*, to paint.] *In the mythology of art.* Name of a bird, the spots of a white kind on the blue plumage of which resemble tears, and are so regularly disposed as to bear the appearance of having proceeded from an artist's pencil. The fabulous history of this animal is, that the Meleagrides, sisters of Meleager, a celebrated hero of antiquity, were so disconsolate on the death of their brother, that they refused all aliments, and were at the point of death changed into birds, preserving on their plumage the representation of their salt tears. This bird took its ancient name from these sisters of Meleagris, to which Numida was prefixed, on account of its Numidian origin: but from the circumstance beforementioned of the artistical distribution of its spots, it has been denominated by the moderns *pintada.*

PIRÆUS. [Gr. Πειραιεύς.] *In archaiology.* The port of Phalerus having been found too small and incommodious for the increasing extent and splendour of Athens, the Piræus, a celebrated port to the west of that city, consisting naturally of three harbours or basins, was constructed by the suggestion and advice of Themistocles. According to the authority of Cornelius Nepos, this port equalled the town in beauty and surpassed it in dignity. They built there five superb porticoes, and three magnificent temples, consecrated to Jupiter, Minerva, and Venus. There also was established the famous library of Apellicon, of which nothing more remains than the enumeration in Diogenes Laertius. Of the three ports, that in the middle is called by the modern Greeks *porto-draco*, and by the Franks, or Western Europeans, *porto-lione*, names arising from a beautiful marble lion ten feet high, that is, three times as large as nature. This lion has been described as an admirable sculpture, and as reposing on its hinder parts. It was pierced, and, as some have conjectured, had belonged to a fountain. Near Athens, in the way to Eleusis, was another, the posture couchant, probably its companion. Both these were removed to Venice by the famous general Morosoni, and may be seen there before the arsenal.

The Piræus gradually became the emporium of all Greece. Hippodamus (the inventor of many improvements on the previous nature of house building) was employed in laying out the ground; and hence the porticoes and temples we have before alluded to. The cavities and windings of Munychia, natural and artificial, were filled with houses; and the whole settlement, comprehending Phalerum and the ports of the Piræus, with the arsenals, the storehouses, the famous armoury, of which Philo was the architect, and the sheds for three hundred, and afterwards for four hundred triremes, resembled the city of Rhodes, which had been planned by the same Hippodamus.

Sylla reduced the Piræus, though not without considerable difficulty, demolished the walls, and set fire to the armoury and arsenals. Strabo, who lived under the emperors Augustus and Tiberius, states, that the many wars had destroyed its long walls, together with the fortress of Munychia, and had contracted the Piræus into a small settlement by the port and temple of Jupiter Saviour. This fabric was then adorned with fine pictures, the works of illustrious artists, and on the exterior with statues. In the second century, besides houses for triremes, the temple of Jupiter and Minerva remained, with the images of those deities in brass, a temple of Venus, a portico, and the tomb of Themistocles.

PISAY or PISAN, because supposed to have been first practised in Pisa. [*pisé*, Fr.] *In architecture.* A species of wall constructed of earth or clay, and which is particularly suited to rural purposes. This method was well known to the Romans, who

employed, for the purpose, means very similar to those now in use. This kind of wall, when well put together, possesses great strength and durability, and is capable of withstanding almost any violence.

Piscina. [Lat.] *In archaiology.* A pond or reservoir of water, principally for fish. The basin placed in the middle of the *caldarium* of the ancient baths was also denominated *piscina.* See Baths.

Place. [Fr. from πλατεία, a broadway, from πλάτυς, broad.] *In architecture.* This word signifies in general any space, of regular or irregular proportions, destined for the erection of a building. It is also appropriated to an open piece of ground surrounded with buildings, such as the *Place Vendome*, at Paris, &c. The beauty of public *places* depends on their regularity. In the centre they are generally decorated with some grand statue, a column, or some other imposing monument.

The Romans used two words (*area* and *forum*) by which to designate a *public place.* The former term meant nothing but a wide unappropriated space; the latter was destined for the carrying on of public business.

Plaister. [Gr. πλάσσω, to form.] *In architecture.* A composition of lime, sometimes mixed with sand, &c. used to parget, or cover, the nudities of a building. See Stucco.

In the arts of modelling, &c. *plaister of Paris* is a preparation of sundry species of gypsum or alabaster dug near Mont Martre, a village in the neighbourhood of Paris, whence its name. The best kind is white, shining, hard, and marbly, and is known by the title of the *plaister stone* or *parget* of Mont Martre. It will neither give fire with steel nor ferment with aquafortis; but readily enough calcine in the fire into a fine plaister, the use of which, in building and casting statues, is well known.

Plaister of Paris is employed for taking moulds or models either of inanimate natural objects or even of living ones, as well as of works of art, which it possesses the power of multiplying—such as statues, *bassi-rilievi*, &c.

The method of representing a face correctly in plaister of Paris is as follows:—The person whose countenance is to be taken is laid on his back, with any convenient thing to keep off the hair. Into each nostril is introduced a conical piece of stiff paper, open at both ends, for the purpose of admitting respiration. These tubes, being anointed with oil, are supported by the hand of an assistant, after which, the face being lightly oiled over and the eyes kept shut, alabaster fresh calcined, and tempered with water to a consistence tolerably thin, is nimbly thrown over the whole countenance by spoonfuls, till it lies nearly the thickness of an inch. This matter grows perceptibly hot, and in about a quarter of an hour hardens into a kind of stony concretion, which, being gently removed, represents, on its concave surface, the very minutest parts of the original face. In this a head of good clay may be moulded, wherein the eyes are to be opened, and other necessary things done. This second face being anointed with oil, a second mould of calcined alabaster is made, consisting of two parts joined lengthways along the ridge of the nose; and herein may be cast, with the same matter, a face extremely like the original.

Plaister of Paris casts from the antique are cheap, and offer a facility to the artist of studying the most beautiful productions of the great masters of sculpture without the necessity either of travelling or possessing a heavy purse; while, at the same time, the amateur is gratified by having it in his power to adorn his rooms with *fac-similes* of the divinest productions of ancient art, which would otherwise exist only for the benefit and delight of the fortunate few. True taste is, by this means, rendered an inexpensive thing;—as Rogers the poet says or sings, when describing the facilities afforded through the interesting medium of engravings and plaister of Paris casts:—

"Here no state chambers in long line unfold,
Bright with broad mirrors, rough with fretted gold;
Yet modest ornament, with use combined,
Attracts the eye to exercise the mind.
Small change of scene, small space his house requires,
Who leads a life of satisfied desires.
"What though no marble breathes, no canvass glows!
From every point a ray of genius flows!
Be mine to bless the more mechanic skill
That stamps, renews, and multiplies at will;
And cheaply circulates, through distant climes,
The fairest relics of the purest times.
Here from the mould to conscious being start
Those finer forms, the miracles of art;
Here chosen gems, impress'd on sulphur, shine,
That slept for ages in a second mine;
And here the faithful graver dares to trace
A Michel's grandeur, and a Raffaelle's grace!
Thy gallery, Florence, gilds my humble walls,
And my low roof the Vatican recalls!
"Soon as the morning-dream my pillow flies,
To waking sense what brighter visions rise:
Oh, mark again the coursers of the sun,
At Guido's call their round of glory run!
Again the rosy hours resume their flight,
Obscured and lost in floods of golden light *.

* Alluding to the print from Guido's exquisite allegorical picture of Sunrise, or *Aurora*, in the Rospigliosi palace at Rome.

"Though my thatch'd bath no rich music knows,
A limpid spring with unfelt current flows.
Emblem of life! which still, as we survey,
Seems motionless, yet ever glides away!
The shadowy walls record, with Attic art,
The strength and beauty that its waves impart.
Here Thetis, bending with a mother's tears,
Dips her dear boy, whose pride restrains his tears.
There Venus, rising, shrinks with sweet surprise,
As her fair self, reflected, seems to rise."
Epistle to a Friend in ROGERS'S POEMS.

"It is the design of this epistle (says its accomplished author) to illustrate the virtue of true taste; and to show how little she requires to secure not only the comforts, but even the elegancies of life. True taste is an excellent economist. She confines her choice to few objects, and delights in producing great effects by small means: whilst false taste is for ever sighing after the new and the rare; and reminds us, in her works, of the scholar of Apelles, who, not being able to paint his Helen *beautiful*, determined to make her *fine*."

PLAN. [Fr.] *In architecture, painting*, &c. The representation, generally speaking, of any thing drawn upon a plane surface: for example, ichnographies, charts, maps, &c. The term is however more specifically applied to the draught of a building such as it appears, or is intended to appear, on the ground; exhibiting the extent, division, and distribution of its area or ground-plot into apartments, rooms, passages, &c. The *raised* plan of a building is synonymous with that which is otherwise denominated the ELEVATION (see that word), or OTHOGRAPHY (which also refer to).

A *geometrical plan* is that wherein the solid and vacant parts are represented in their natural proportions.

A *perspective plan* is that exhibited by degradations or diminutions, according to the rules of that science. See PERSPECTIVE.

It is customary in extensive buildings to have a different plan for each of the three first stories; and in order to render plans intelligible, the massives are commonly distinguished with a black work, the projectures on the ground drawn in full lines, whilst dotted lines characterize those which are supposed to be above them. The alterations or augmentations to be made are distinguished by a colour different from what is already built, and the tints of each plan made lighter as the stories are raised.

PLANE. [Lat. *planus*, from Gr. πλατυς, broad.] *In geometry*. A plain surface, or one that lies evenly between its bounding lines: and a right line being the shortest extension from one point to another. In like manner a plane surface is the shortest extension from one line to another.

In *mechanics*, planes are either horizontal, that is, parallel to the horizon, or inclined thereto. See MACHINERY.

The determining how far any given plane deviates from a horizontal line forms the whole business of levelling. See LEVELLING.

In *perspective* we meet with the perspective plane, which is supposed to be pellucid and perpendicular to the horizon; the horizontal plane, supposed to pass through the spectator's eye, parallel to the horizon; the geometrical plane likewise parallel to the horizon, wherein the object to be represented is imagined to be placed, &c. See PERSPECTIVE.

The term *plane* is frequently employed to express an ideal surface, supposed to cut and pass through solid bodies; and on this foundation the whole doctrine of conic sections may be said to be built.

PLANETS. [Gr. πλανήτης, a wandering star, from πλανη, straying.] *In sculpture, engraving*, &c. The planets are depicted upon several medals struck at Alexandria, upon sundry engraved astrological stones, upon a circular altar at the villa Pinciana, described by Visconti; and upon a bronze published by Montfaucon (1st vol. of *Supplement*, pl. 17), where we find the week represented by seven planetary figures, the first of which is Saturn, the second the sun, the third the moon, &c.

PLASTIC. [Gr. πλασσω, to form.] A term applied in speaking of the art of modelling, which is sometimes denominated the *plastic-art*.

PLAT-BAND. *In architecture*. Any flat square moulding with little projection; the different fasciæ of an architrave are called plat-bands; the same term is applied to the list between flutings, &c.

PLATE. [Dutch, *plaque*, Fr.] A piece of metal beat out into breadth. Wrought gold or silver. A small shallow vessel in which meat is taken.

PLATFORM. *In architecture*. A row of beams supporting the timber-work of a roof, and lying on the top of a wall where the entablature ought to be raised. A sort of terrace or open promenade at the top of a building, commanding a prospect of the surrounding country. Any temporary elevation of a plane description raised above the surface of the ground.

PLATINA. [Spanish.] A metallic substance not long discovered. The name, which has an allusion to its colour, is a derivative of *plata*, and signifies *little silver*.

PLAUSTRUM. [Lat.] *In archaiology.* Montfaucon has published in his *Antiquité Expliquée* (vol. iv. pt. 1, pl. 118), two of these machines drawn from the Antoninus column. They resemble somewhat in appearance our carts.

PLINTH. [πλινθος, a brick.] *In architecture.* The lower member of a base. See BASE.

PLUMBAGO. [from *plumbum*, Lat.] See BLACKLEAD.

PLUME. [Lat. *pluma.*] *In archaiology.* Plumes of feathers were often used by the ancient artists to decorate the heads of their divinities and other personages both male and female. The nine Muses are frequently to be met with thus adorned.

PLUMMET. [from the Latin *plumbum*, lead.] *In measuring.* A weight of lead hung at a string, by which depth is sounded, and perpendicularity ascertained. Sometimes the string descends along a wooden ruler raised perpendicularly upon another, in which case it becomes a level. See LEVEL.

PLUTEUS. [Lat.] *In ancient architecture.* Vitruvius applies this term to a species of balustrade or support before the porticoes of buildings, and which traversed the intercolumniations. A model is to be found in the *Pitture d'Ercolano*, vol. i. pl. 41. The *plutei* were constructed sometimes of marble, sometimes of wood.

PLUTO. [Gr. πλουτον, rich: because (according to Cicero) riches are dug from the bowels of the earth.] *In the mythology of art.* Both Pluto and Proserpine are common subjects with the artists. There is generally a resemblance given between the faces of the three brothers, Jupiter, Neptune, and Pluto; which appears in their several figures, and is well preserved by Raffaelle in his *Feast of the Gods on the Marriage of Cupid and Psyche.* Jupiter's countenance is made the most serene and majestic; Pluto's the most sullen and severe. In a piece of painting discovered about the end of the last century, in an old burial-place of the Nassonian family, Pluto and Proserpine are sitting on thrones, whilst Mercury is introducing the ghost of a young woman, who seems intimidated at Pluto's stern look. Behind stands her mother, waiting to conduct her back to some grove in Elysium. Pluto holds a sceptre in his hand, and has a veil over his head.

PNIX. [Gr.] *In archaiology.* The spot where the Athenian citizens assembled to choose their magistrates. It was situated near the Acropolis, and almost in front of the Areopagus. Originally, the shape and ornaments of this place were extremely simple. It was however subsequently adorned with statues, and served as an ODEON. See that word.

PODIUM. [Lat.] *In architecture.* A balcony or open gallery. In the amphitheatre, the senate, foreign ambassadors, vestal virgins, and the emperor, sat in the *podium*, which was projected over the wall of the *arena*, and was raised twelve or fifteen feet above it.

PŒCILE. [Gr. ποικιλος, various.] *In archaiology.* A celebrated portico at Athens, which received its name from the variety of paintings, &c. exhibited there. It was here that Zeno kept his school; and here also their lessons were disseminated to the stoics; whence their name (στοα, a porch). Among many other pictures which adorned the Pœcile, we may particularize: —the Athenians in order of battle at Ænoe against the Lacedæmonians; the same people conducted by Theseus against the Amazons; and subjects taken from the siege of Troy, &c. &c. The only reward bestowed on Miltiades, after the battle of Marathon, was the having his picture drawn more conspicuously than those of the officers who fought with him, in the representation of that celebrated victory which was hung up in the Pœcile.

POESY. [Gr. ποιησις, from ποιέω, to make.] *In the mythology of art.* The Genius of Poesy painted at the Vatican by Raffaelle is borne upon the clouds: she is seated on a piece of white marble on which are sculptured two masks: she has wings at her back, and a laurel crown on her head. Her dress is modest, a large mantle dropping even to her feet. She holds in one hand a lyre, and in the other several heroical poems. Her entire attitude is expressive of high enthusiasm; and the two lesser genii accompanying present an inscription in Latin, signifying —*It is the Deity who inspires her.*

POETS. *Agreement between poets and artists.* The subjects in which this is chiefly noticeable may be arranged as follows:—I. The amours of the gods with mortals; those of Jupiter with Semele, Danae, Europa, and Leda, with the story of Ganymede. Neptune's rape of Cænis, Apollo and Daphne, Bacchus and Ariadne, Venus and Adonis, Diana and Endymion. II. The amours of the heroes, or offspring of the gods:—as Perseus and Andromeda, the actions of Hercules and Bacchus before their deification, &c. III. Fabulous things relating to those famous men not properly heroes:—as Arion on his dolphin, Theseus killing the minotaur, Bellerophon engaging the chimæra, Helle's crossing the Hellespont on a ram, and Dedalus's flight through the air. The judgment of

Paris, and descent of Orpheus into hell; the Amazons and Pigmies; the stories of Narcissus and Actæon, &c. IV. Historical facts delivered for truth:—as Meleager and Atalanta, Hero and Leander, the Theban and Trojan wars, the rape of Helen, the sacrifice of Iphigenia, &c. V. Things relating to the Roman history:—as Romulus's death, the rape of the Sabines, Scævola burning his hand, Curtius devoting himself, Lucretia killing herself. VI. Subjects relating to religion:—as temples and altars, from the reverses of medals; the various sacrifices, from gems, paintings, and rilievi; dresses of the augurs, priests, and vestal virgins, from statues; the *lectisternia* to the great gods; the processions, especially the Bacchanalian, so frequent in antiques as well as in the descriptions of the poets; the marriage and funeral ceremonies, which were most superstitiously observed. VII. Things belonging to the arts and sciences, and used by the Romans in civil life:—as their dress and the furniture of their houses; their games and sports, musical instruments, carriages, chariots, boats, and ships. VIII. What related to military affairs:—their arms, ensigns, and military dresses, from the Trajan and Antonine pillars; their mural, naval, and laurel and oaken crowns, from medals; their trophies and triumphs, from triumphal arches.

All these particulars would furnish materials for an entire course of comparing the descriptions of the Roman poets with the remains of the artists, and thus enabling these two most interesting studies mutually to explain and illustrate each other. Mr. Spence observes, in his *Polymetis*, that if such an extensive inquiry were to be made likewise into the Greek writers, the whole would form a more useful and complete body of antiquity than any hitherto published, and at the same time might be less voluminous than the collections of either Grævius, Gronovius, or Montfaucon, with the work of which latter he expresses himself somewhat dissatisfied.

Point. [Fr. formerly *poinct*, from *punctum*, Lat.] *In perspective, geometry*, &c. *Point of sight*. See Perspective, in which art the word is used to denote various poles or places with regard to the perspective plane.

In geometry, point is, according to Euclid, that which hath neither parts nor magnitude. They are the ends or extremities of lines, and if a point be supposed to move any way, it will by such motion describe a line.

Point is also an instrument of steel or iron, used by engravers, etchers, cutters in wood, &c. to trace their designs with on the several materials employed. See Engraving and Etching. The point of the diamond is sometimes used in engraving fine gems, and is esteemed on account of its extreme hardness. Pliny speaks of the ancients putting in the rudiments of their figures with a diamond point, which was likewise used by them to give the finishing stroke to their works.

Polia. [Lat.] *In architecture*. A beautiful species of stone, much employed by the ancients in building, and known likewise by the names of *Amiantus* and *Corsoides*.

Polish. [Lat. *polio*, to make smooth.] *In enamelling*. We say of those paintings in enamel which, placed to the fire, acquire thereby a high lustre, that they have taken *a good polish*.

Polisher. [from to *polish*.] Or *Burnisher*. An instrument for the purpose of polishing or burnishing things calculated to undergo that process.

Polishing. [from the same.] The operation of giving a gloss or lustre to certain substances, such, for example, as glass, metals, marble, &c.

The usage of polishing marble figures appears to have been very common in ancient times, and remains so still.

Polyptychon. [Gr. πολὺς, many, and πτυσσω, to fold.] *In archaiology*. Name given to a *diptychus* composed of several tablets. See Diptychus.

Polystyle. [Gr. πολὺς, many, and στυλος, a column.] *In architecture*. Term applied to an edifice, the columns of which are too numerous to be readily counted; which reminds us of an old tradition respecting the pillars at Stonehenge—namely, that no two persons ever counted their number alike on the first trial.

Pomœrium. [Lat.] *In archaiology*. A space about the walls of a city or town, as well within as without, which was held sacred at once from the plough or the builder, and, according to some, so set apart for the defence of the city. Within this enclosure altars were erected, whereon sacrifices were offered to the gods.

Pompeii. [This town according to some derives its name from the procession (πομπὴ) of the heads of Gorgon exhibited there by Hercules.] *In the history of the arts*. A town of Campania, which was anciently a place of very flourishing trade, the Sarnus (now Sarno), near the banks of which it was situated, furnishing the inhabitants with favourable means to export their produce. This town had the same fate as Herculaneum, and was buried under the lava and cinders of Vesuvius

from which it is about two or three miles distant. At a mile from the Torre dele' Annonziata the traveller must quit the route of Salerno and turn to the right to come at the ruins of Pompeii. The first object discovered is what is called the country house; it was thus named because it is situated without the walls of the town, but is not perceived till quite near it. It is the same with the other edifices of Pompeii, which are all hidden beneath the heaps of cinders arising from the diggings which they have undertaken since the discovery. It is for the same reason that one can hardly form an exact idea of the real extent of the town, and the more so, on account of the small elevation of the houses. This country house had two divisions, one higher than the other; columns, or rather square pillars, formed a covered gallery, which was continued round the court, and six other columns, destined probably to sustain a kind of portico. These columns or square pillars were covered with a yellowish stucco, and the pedestals were black and ornamented. The second division of the edifice was decorated with several columns, which formed a rich portico, of a proportion however sufficiently little. In general all the parts of this country house were extremely close and narrow. Upon the road which passes before the door of entrance to this house, one sees the tracks of carriages. Near to the door have been found two skeletons; the one held a key in one hand, and in the other a purse filled with medals and precious stones. They believe that the other had carried a box, shutting up different valuable things, which have been found near him. Perhaps this was the master of the house and his slave, who, in running away, had carried the most precious objects, but who, arrived at the door, found it already encumbered with cinders, under which they have been buried. The court of the house formed a square of ninety-four feet. The two corners of the side of the entrance were occupied by two rooms, of which the one served probably to lock up the corn, the other to thresh it.

In entering the court one sees a covered portico supported by six columns; on two sides it was surrounded with trees, of which there are still seen trunks and branches. Before this portico was a basin, of which they have also found the pipes of lead on the spot. At the end of the gallery was a vault of stone, which appears to have served as a cellar because there have been found there several of those vessels in which the ancients preserved their wine; it is pretended even that in several of these vessels have been found the remains of wine which was thickened, and which is become, by the lapse of time, as hard as stone. Near this, one descends into a stone cellar, very dark, and covered with stucco; it is left absolutely whole, but has been blocked up with cinders. Near the staircase which leads to this cellar have been found seven skeletons of women, whom terror, in the moment of the volcanic eruption, had no doubt carried to shelter themselves in this remote place, where they perished. They were all pressed, one near the other, in a corner near to the door, and in discovering their bones they have observed the image and form of their bodies, which were preserved in the cinders; they have there even discovered parts of their clothes. These impressions are seen still in the Museum de Portici; they show there among others that of the breast of one of these women, which is so well preserved that they perceive there the impression of a very delicate lace. They perceive there also the impression of rings, of bracelets, of necklaces, and of earrings, with which these women were adorned. Hamilton, in the account which he has published upon the discoveries of Herculaneum, makes on this subject the remark that the volcanic cinders, mixed with a great quantity of water at the time of the eruption, formed a kind of clay, which would produce the same effect as the stuff which serves to make models. Near to this cave was a very dark chamber of which they have not been able to guess the use, as also that of five other little rooms which come one from the other; each has no windows.

At the end of the gallery one descends by a staircase to the second division of the house, which contains several rooms more or less grand, and behind which was the garden, into which you descend also by a grand staircase. In all this part of the house they have not found a single place which can be regarded as a bedchamber, with the exception of a kind of alcove and circular wardrobe, having three windows into the garden, in which latter they have distinguished still the compartments, as of different shrubs and thickets, which probably have been rose bushes. This second part of the house was the most elegant; the pictures with which it was decorated were done with great care; those above all of the principal piece were very well executed. Near to the chamber of which we have been speaking, and

which may be regarded as a sleeping room, was the eating parlour, and at the side was the buttery, from whence one enters into a room which appears to have served as a vestry, for there they have found clothes. Another less court, embellished with a basin, and columns of different proportions, was near the great road, and was the entrance to the great court of the interior, where was the door by which one might go out upon this great road. Near the garden are the cold bath and the vapour bath.

At a little distance from this house they have found near the great road a small sepulchral monument ornamented solely with fasces. An inscription makes it appear that a certain Diomedes, or a free man of Arria, has consecrated this monument to his mistress and her family, as for himself and his.

The fragments of columns which were near the tomb of the arch-priestess Mammia, make one think that formerly it was more elevated than it actually is; upon a square base it had a circular building ornamented with columns and marble statues. By a door one enters into the first enclosure, that is to say, into the fore court of the sepulchral monument; the tomb, correctly speaking, was surrounded with a terrace; some steps conducted to the base of it, upon which one still finds columns. From thence an opening leads into the tomb, where there are several niches, of which the principal enclosed an urn, which probably contained the ashes of Mammia. In the fore court were two open excavations; these were the entrance to two vaulted caverns, which could not have any other use than to serve for burying. Upon the wall of the sepulchral monument, and near the excavations which we have just mentioned, they have found masks of a colossal greatness; they appear not to have belonged probably to the tomb of Mammia, which is of a proportion much too little; they remind us of scenical masks, which renders sufficiently probable the opinion of many learned men who have regarded this place as the burying place of the players of this town.

The entrance to Pompeii is small and little; apparently it would not announce a town of great importance. It consists in fragments of columns of which they have found in the environs many considerable pieces, and fine capitals of the Ionic order; probably these columns have served formerly to support edifices. On the two sides there are arcades and porticoes, which form the entrance to the ways, or paths, for the foot soldiers; they are continued on the side of the great road. In many modern towns of Italy and other countries there are like roads for the foot soldiers; but that of Pompeii, which is here the subject, are very narrow; they are but three feet wide. This agrees with the breadth of the principal road, which is but ten or twelve feet, though it is lengthened to a distance of fifteen or sixteen fathoms. In the ancient ground of the road is seen still very obvious traces of tracks of different carriages, which prove that there was four feet distance between the wheels. At the entrance is raised a square pedestal, which, according with what one sees there, appears to have supported a pretty large column. Several tumulary monuments which are found in the neighbourhood, as well as the inscriptions upon the pedestal itself, causes us to think that this was a sepulchral monument. Very near to the door are found two semicircular benches of about twenty feet long; there is but one of them well preserved; we there read an inscription which says that this was the burying place of the priestess Mammia, which has been granted to her by a decree of the Decurions. This last circumstance, that her burying place was assigned by a decree of the Decurions, proves that the family of this priestess enjoyed great consideration at Pompeii.

In following this principal street one recognises still the form of different shops, notwithstanding the ravages caused by time and the earthquake. To judge from a kind of balustrade or wire lattice which is seen at one of them, it was the shop of a dealer in perfumes and spirituous liquors; below, there is a kind of pipe or excavation in marble, but it would be difficult to assign the use of it. In the same street and very near to the door of the town, one sees a fantastical sign, and which chance has perfectly well preserved. It is a Phallus or Priapus grossly sculptured in basso rilievo in the stone post of a house. The general opinion is, that this was the sign of a house consecrated to Venus; and one is supported in this opinion, above all, by a remarkable inscription found at Pompeii and reported by Winckelmann, in his letter to the Count de Bruhl, upon the discoveries of Herculaneum, at page 62 of the French translation by M. Jansen. Others have thought that this was the sign of a magazine or manufactory of those figures which we call obscene, but to which the credulity of remote times attached religious ideas, and which the

ladies carried as amulets. Mr. Hamilton thinks that it was rather the sign of particular worship, rendered to the god of gardens, as are now seen sometimes houses having for a sign the figure of some saint. According to M. Hirt, the distribution of the house which has this Priapus for a sign proves that it was rather a tavern than a place consecrated to Venus. It appears to him probable that many of the shops with which this street is bordered were taverns, in which they gave at the same time to eat, and in which they prepared warm drinks; or a kind of coffee-houses. One sees every where about a similar distribution and style of architecture; several houses are very agreeably ornamented with marbles. In these buildings they have found but the most necessary utensils; but all were very well worked, and were of the most agreeable forms; there were lamps, candelabras, vessels, and kitchen utensils, weights, statues, different vessels of all sizes, in earth, in bronze, and in glass; many fragments of glass windows; small idols, women's trinkets in gold and silver; mirrors, wax tablets for writing, surgical and musical instruments; colours of all kinds; medals in gold, silver, and bronze; children's playthings, toothpicks, paint boxes, even eatables, corn, fruits of different sorts, &c. They have found there neither statues nor busts of a great size; the best paintings have not been found so much at Pompeii, as at Herculaneum. The wooden utensils have been carbonised by the burning cinders, or are fallen to rottenness.

The temple of Isis is without doubt the most remarkable of the ruins discovered at Pompeii. The columns with which it was surrounded are almost entirely preserved. The half of those which ornamented the peristyle have been broken, as the capitals and the pediment. The temple itself is almost entirely built with bricks, and on the outside covered with a very solid stucco, which the ancients in general used frequently. The style of architecture is rather agreeable than strict. The orders are of a small proportion, which diminishes the effect the edifice would have had if it was of a more imposing architecture. They have found in this temple all the instruments belonging to the religious ceremonies, and even the skeletons of priests, who had been surprised there, and surrounded by the shower of cinders in the middle of the occupations of their ministry. They show also their vestments, the cinders and coals upon the altars, the candelabras, many lamps, cisterns, vessels to hold the holy water, the *pateræ* employed in libations, a kind of kettles to preserve the intestines of the victims in; cushions upon which they placed the statue of the goddess Isis, when they offered sacrifices to her; the attributes of the divinity, with which the temple is every where ornamented, &c. Many of these vessels have the figure of an ilex, of an hippopotamus, or a lotus, and what renders them much more important is, that they have been found upon the same places where they were used, so that one can have no doubt upon the reality or the kind of employ of these objects. The walls of the temple were ornamented with paintings relative to the worship of Isis; they have found there, among others, the figures of priests in their habits; their vestment was of white linen, the heads of the officiating priests were shaven, their feet were covered with a fine and light lace, through which one distinguishes the muscles. It appears that in the sanctuary of this foreign divinity, they granted also places to other divinities, for they have found there statues of Bacchus, Venus, and Priapus, the greatest part in wood, with feet and hands in marble; that of Priapus was more than the others enriched with that durable material, especially at the member which characterizes this divinity. All which were transportable of these different objects have been placed in the Museum de Portici. It would be desirable that they had separated them there from other antiquities, because those who had seen the temple might be better able to recognise the instruments and utensils which they found there.

The temple had the form of a long square, and was not covered. A covered gallery supported by columns surrounded the temple; it served for a shelter in case of bad weather. In the middle was raised a small chapel, to which you are led by some steps, and which appears to have been the sanctuary of the goddess. At the bottom was probably the place where they assembled those initiated, and on the side one sees another cellar, in which the three statues of Venus, Bacchus, and Priapus were united in one niche. The principal entrance to the temple was on the side of the street of Pompeii; and on each side of the entrance was an altar, before a figure of the goddess, wrought in basso rilievo. The grand altar upon which they sacrificed was three feet and a half high; and they have found there ashes and bones partly broken and burnt. The principal door of the interior

sanctuary consisted of two wings; they have found there still the brass hinges upon which these were put in motion; which have been carried to the Museum de Portici. Above the door is an inscription, by which one sees that "Nonius Popidius Celsinus had reconstructed, at his expense, and *from the foundations*, this temple of Isis, which an earthquake had destroyed; and that, to recompense this liberality, he had been, at the age of sixty years, received gratis in the college of the Decurions." This inscription, as well as the ancient pavement of lava, proves then that this country has often been exposed to volcanic eruptions. Perhaps the earthquake which this inscription mentions is that which Seneca and Strabo speak of, which shook and overthrew the most part of the edifices of Herculaneum and Pompeii, obliged the inhabitants to fly, and menaced them with the most disastrous ruin. Upon a fine pavement in musaic they have found still another inscription, which appears to indicate that this pavement was made at the expense of Corelia (probably Cornelia) Celsa, wife, daughter, or parent of Popidius Celsinus, who built the temple. The skeleton of a priest, which they have found upon this pavement, has caused it to be thought that the place was devoted to priests, and to the initiated of the first class. This skeleton was near a marble table; it appears that this priest had been surprised by the volcanic eruption at the moment he was going to eat fish, for in digging they have still found the relics dispersed, and some vessels which were used to prepare this sort of food. We know, from Plutarch, that the priests of Isis might not live upon any thing but fish. The statue of the goddess in white marble was found in this sanctuary. It was placed upon a square base; and is of a very agreeable style. Near it has been found a stone table, covered with hieroglyphics: the great altar on which they sacrificed is also of an elegant form. There are still to be found there different ornaments, different fragments of columns which decorated the sanctuary, masks of baked earth, which served, at the same time, as ornaments, and to collect the rain waters. Probably the roof of the gallery was ornamented with similar masks; the open mouth served to give efflux to the water. They have found there censers or *acerræ*, in thin iron, serving to burn the perfumes.

Near the wall, and upon an elevated place, are the remains of a temple of Greek architecture: these remains resemble pretty much those found in the ruins of Pæstum. The pavement of the temple, which may still be seen, formed an oblong square, and is raised upon steps, which surround it on all sides. It had a colonnade, which formed a covered gallery.

The small remains which are found of this edifice would indicate that it had been destroyed in an eruption anterior to that which drew with it the ruin of the whole town; as we have seen above that the temple of Isis had already sustained before a like catastrophe. On the side of this monument are still seen five steps of twelve inches in height, and fourteen in breadth: the entrance was from the side of the sea, and nine steps, six inches in height, formed a projection, and conducted to the peristyle. It appears that it had eight columns at the façade, and eleven along the side. The musaic pavement is still inlaid in many places, and shows plainly that the temple had two divisions: the most distant was probably the sanctuary: there exists still a round and insulated altar, and, without, a long square stone upon which the victims were placed. As to the rest, it appears that this monument is the most ancient of all those at Pompeii. Its dimensions, what remains of its columns, &c. prove that it was of noble and majestic architecture: it appears that it was a periptery. The place upon which it is built is ninety-one feet in length, and near sixty-four in breadth: the columns are of the Doric order; their diameter is three feet and a half: it appears that their height was equal to six diameters. They have found here a moulding in baked earth which probably surrounded the cornice, and which, adorned with these masks, of which we have spoken above, serves to give efflux to the rain water.

Between this temple and that of Isis, which we have spoken of above, there was a spacious edifice which, according to all appearance, has served for an apartment and place of arms to the Roman soldiers: which is the reason it has been called the *soldiers' quarter*. This edifice has least suffered from the earthquake, because it was of less height, and was of a lighter construction. Experience has proved that high edifices, and of a massy construction, are much more exposed to be ruined by earthquakes than frail and light buildings. Sicily, among others, furnishes more than one example of temples which one should think ought to have been preserved by their colossal size and the solidity of their construction.

It is precisely the light architecture and little elevation of the greater part of the houses of Pompeii which has caused them to be so well preserved. In the quarter of the soldiery they have found almost all the walls, and nearly all the columns, entire. The form of this edifice is that of a long square, and it is surrounded by columns, and a covered gallery. This gallery communicated with several chambers or cells placed along, and which probably served as lodging rooms for the soldiers. The interior court, in length about twenty-three toises, and breadth seventeen, served probably for military exercises. The columns are of the Doric order: they have no base; they are in height eleven feet, and their diameter is eighteen inches. The gallery between the colonnade and the wall is thirteen feet seven inches wide. It served for a promenade, and, at the same time, to shelter the cells, in each of which were lodged, probably, four soldiers, for in each there are four armours. These cells were not of equal dimensions: all were very small, covered with stucco, ornamented with arabesque paintings and musaic pavements. They were shut in by means of a folding door, which opened on the inside, as may be judged by the situation of the threshold. They received the light only by the door, and perhaps sometimes by an opening contrived in the ceiling. The size of two of these sets of armour, and the weight of the helmets which have been found in one of these chambers, have induced some persons to think that they were only trophies raised to ornament these places: however, as they were covered with cloth, we have reason to believe that they were really used. Among the armours which had been found there, there is, according to M. Hamilton, a helmet upon which is engraved the siege of Troy. These helmets were nearly similar to those of our ancient warriors in the times of chivalry, and were furnished with vizors. There is still found there a trumpet of brass, of a form rather singular; six ivory pipes fixed to the lower part unite in one single mouth-piece: they have no holes to vary the tones, but the difference of their diameters would produce different sounds, which, joined to the sound of the trumpet, must have formed a military music, very noisy, although a little monotonous. The bronze chain which was attached to it has served, no doubt, to hang it upon the shoulder. The neatness of these chambers, the finish of the paintings with which they were ornamented, the musaic which formed their pavement, contrasts very much with the darkness which must have reigned there, and the little ease which they afforded to those who inhabited them: but it appears that the soldiers, as well as the greatest part of the inhabitants of Pompeii, passed the greatest part of their time upon the terraces and in the galleries, and returned in their chambers only to sleep, or, at the most, to take some repast. It is at least this which the distribution of almost all the edifices discovered at Pompeii would induce one to believe. It is this which has made many persons to think that this edifice was rather destined to military exercises and gymnastics than to dwelling-houses. M. Bartels, in his Letters upon Calabria, says, however, that it was a true lodging-house; and he supports his opinion principally by the resemblance of this quarter with the Villa of Hadrian at Tivoli. In this case, however, it must be granted, that the garrison of Pompeii could not be very strong, and did not much exceed forty soldiers. There are there also larger chambers, which are considered as the abode of the commander; because at a little distance have been found the skeletons of some slaves, and of a horse loaded with clothes, stuffs, and valuable effects, which they endeavoured probably to save. At some steps further there was a peristyle ornamented with columns, with fine capitals; probably this was the side door. Very near another door leads, by means of four steps, to a place which was equally surrounded with a covered gallery, supported by Ionic columns.

To the right is the entrance of a little theatre, which is believed to have been covered; the steps only are seen, the rest is covered with ruins. Some travellers think that this edifice was an odeon. To the left of the door of the soldiers' quarter there are five little divisions, chambers, or cells, in one of which has been found a handmill; and one of the others appears to have served as a prison to the soldiers that they had put in irons. They have found there several skeletons which appear to have belonged to the unhappy soldiers who, at the time of the eruption, found themselves here in prison, and without the possibility of saving themselves. The disposition of these skeletons makes it appear that the manner of putting prisoners in irons resembled that which is still in use in many countries. Their feet were placed upon a block of wood, and underneath passed an iron which held

them, and which was fixed to the block by solid nails. The remains of this edifice, in other respects, demonstrate clearly enough that it made part of a theatre, to which it appears to have served for a peristyle. The proscenium of this theatre is, in a great part, discovered, and appears to have been of a form similar to that of Herculaneum. The covered gallery with which it was surrounded, and where are found the vomitories, is also in a great part discovered.

The construction of the houses of Pompeii shows that this town must have been built upon a very unequal surface, perhaps even upon the extinguished crater of an ancient volcano; at least, it appears that it had subterranean communications with Vesuvius, for at the present time a cellar, which has been found under the terrace of a small house, is filled in such a manner with a suffocating effluvia, that it is necessary to use every precaution on entering it. When this cellar was discovered, there was found there the skeleton of a woman, stretched out by the side of a large vase, near a stove which heated, at the same time, two bathing rooms and a dark rotunda, lighted only by an opening contrived in the roof. This place is equally remarkable to the naturalist and the antiquary. The vase, by the side of which the skeleton is stretched upon a heap of cinders, is three feet and a half in diameter, and appears to have served for a bathing tub. The place where the skeleton is found, and its position, evince that the person has been suddenly thrown down, which was, without doubt, the effect of an asphixy produced by the noxious effluvia. It is owing to the counsels and solicitations of M. Hamilton, that travellers find this skeleton still in the place and position it was discovered in; it is certain that it makes here a much livelier impression than if it had been transported to the Cabinet of Portici. It may be said that it is nearly the same with respect to other antiquities found at Pompeii and Herculaneum.

Even at the present day, the entrance of this cellar is sometimes dangerous, on account of the mephitic air with which it is often filled. At other times these exhalations are less sensible, or do not rise sufficently to reach the organs of respiration. This cave and many others evince that these fatal exhalations are subject to variations, which depend, perhaps, on the atmosphere; or on the state of the nearest volcanoes, which communicate with these subterraneous places. Relative to Pompeii the works cited at the conclusion of the article HERCULANEUM may be consulted.

POMPEION. [Gr.] *In architecture.* Name of a sumptuous edifice of Athens, in which all the sacred utensils and other things necessary for the celebration of the fêtes were reposited. It was erected at the entrance of the ancient city, by the side of the port of Phalerus, and embellished with a multitude of statues of heroes. This building had been thus denominated because they transported thither, with much pomp and display, all those articles which appertained to the worship of the gods.

PONDERATION. [Lat. *pondus*, a weight.] *In painting, sculpture,* &c. The act of weighing or balancing. It is indispensable that the artist should pay careful attention to this matter, in drawing his different figures, for without such attention he can give them neither attitudes nor movements that shall be just and conformable to nature.

POPLAR. [*populus*, Lat. *peuplier*, Fr.] *In archaiology.* Carlo Fea ranks this tree amongst those which were used by the ancients in the making of statues. Neither Pliny nor Pausanias, however, bear him out in this application of it.

POPPY. [popig, Saxon.] *In archaiology.* The Egyptians had a sort of veneration for this plant, which is found depicted upon several of their monuments. They represented the god of sleep as crowned with poppies, an emblem which has appertained to this deity ever since. Sometimes he was seen couched upon a bed thereof. The poppy was also consecrated to Ceres. It was esteemed as a symbol of fecundity, on account of the number of seeds produced by each. In the *Corpus Inscriptionum* of Gruter (vol. i. p. 102), we find the engraving of a *basso rilievo* which represents Hope holding ears of corn and heads of poppies. A red jasper, in the collection of Stosch, exhibits a poppy-head encircled by a serpent. Further information on the subject may be obtained by consulting a work entitled:—*Mekonopaignion; sive, Paparer ex omni Antiquitate erutum, Gemmis, Nummis, &c. Æri incisis illustratum*, Noribergæ, 1713, 4to. Frederick Michael Lochnar, the author of this work, has therein collected all those ancient monuments whereon the poppy is depicted.

PORCELAIN. [Fr. *porcelaine.*] *In painting, modelling,* &c. This beautiful species of earthenware is principally manufactured

in China: and this being the case, it is curious that the natives of that country are quite unable to pronounce the word itself which has been applied to it by Europeans, their language comprising no such sounds. Some say that the derivation is from the French *pour cent années*—in consequence of a notion that the materials of porcelain were matured during that period under ground.

All white and semitransparent earthenwares receive the common appellation of porcelain. Yet among these there are infinite varieties; and the propriety of affixing one generic name to the whole may well be doubted.

As we have already said, China is the principal source from whence valuable porcelains are drawn, and to that country Japan may be added; there have been, however, some very successful potteries established in various European nations, such as France, Saxony, and more recently in England, Italy, Germany, &c. At the same time, these sorts differ not only from those of the eastern nations, but from each other also.

Tsé-ki is the name given to this composition in China, and the two chief ingredients employed in it are called *pé-tun-tsé*, and *kao-lin*, from the union of which the paste is produced. The former consists of fragments of rock extracted from certain quarries, and reduced to a very fine powder. The colour of the best kinds inclines slightly towards green. The *kao-lin*, closely examined, appears to be nothing else than a very pure white sand, intermixed with shining particles. In proportion as these materials are pure, and of good colour, the porcelain becomes more or less valuable.

The art of fabricating porcelain appears to have been understood at a very early period, and we are ignorant of its actual origin. That the Egyptians were acquainted therewith is pretty evident. From Egypt it most probably passed into Asia, and the Chinese empire having undergone few or no revolutions, those arts once introduced there were the more likely to be retained.

Authors and historians speak of a remarkable monument existing in the vast plain situated near the city of Nankin. It is an octagon tower, with nine arched stories, encrusted with marble in the interior, and covered with porcelain without, from which circumstance it has received the appellation of the *porcelain tower*. At each story is a gallery, and all are covered with roofs of a green colour, supported by gilded rafters, from which depend little copper bells, which, agitated by the wind, send forth an agreeable sound. The point of this curious structure is surmounted by a pineapple said to be of solid gold, and the workmanship of the whole is so skilful, that the spectator can by no means detect the places at which the several pieces of porcelain are joined together, whilst the lead and enamel covering different parts of the building, glazed with green, yellow, and red, give it, at some little distance, the effect of being enriched with gold, emeralds, and rubies. FISCHER has represented this tower in his *Essai d'Architecture Historique*. It seems to have subsisted for eight hundred years without receiving injury.

In the fabrication of porcelain the larger works are executed in parts, which are subsequently put together, and cemented with paste of the same substance softened with water. The seams being polished with an instrument on both sides, no trace remains of them after the vessel has been covered with varnish. Thus are added such pieces as have been either fashioned upon moulds or modelled with the hand—for example, the embossed works, grotesque images, figures of animals or plants, busts, &c. With regard to that description of ornaments not in *rilievo*, they are either put on with a stamp or engraven.

A piece of porcelain having been properly fashioned and prepared, is handed over to the workmen employed to paint thereon. These *hoa-pei*, as they are denominated, possess no regular rules of art, but being generally ignorant men, and engaged in a mechanical pursuit, content themselves with representations of the most absurd and monstrous kind: all their knowledge, indeed, is the result of practice, guided in most cases by a whimsical fancy. Some of these, however, as may be imagined, discover more taste than others; and there are, consequently, sometimes to be met with instances of well painted animals, flowers, and even landscapes, on this elegant kind of ware. The human figure is generally the worst executed.

The artist who should feel disposed to paint upon porcelain should, above all things, attach himself to the exquisite forms and graceful proportions which have come down to us upon the Grecian vases and other relics of antiquity: and it is also essential that the subject represented on each piece, whether a vase, a dish, a drinking cup, &c. should bear some relation to the purpose for which the article is meant, while a uniformity of design should run

through the various pieces intended to make up a service.

With respect to the history of Chinese porcelain, and the art of fabricating it, the reader is referred to the description of Father d'Entrecoller, Jesuit, to be found in the *Recueil des Lettres Edifiantes*, and since then copied into the *Histoire de la Chine* of Father Du Halde, and the *Recueil des Observations curieuses*.

Porch. [Fr. *porche*, Lat. *porticus*, from *porta*, a gate.] *In architecture.* An arched way or vestibule at the entrance of a building, more particularly used in churches. This porch is sometimes supported by columns or pillars; and anciently, when it had four columns in front, was called *tetrastyle;* when six, *hexastyle;* when eight, *octostyle*, &c.

Pork. [Lat. *porcus.*] The animal whose flesh is thus denominated was held sacred among many of the nations of antiquity, particularly by the Cretans. The Egyptians, on the other hand, held it to be unclean and foul, and the eastern nations generally, as has been supposed by philosophers, were forbidden to use it as food, from motives of health, on account of the heating and exciting nature of its flesh.

Porphyry. [Gr. from πορφύρα, purple.] *In architecture, statuary*, &c. Winckelmann, in his *Observations on the History of Art*, asserts that it is by no means sure that Egypt produced any works in porphyry, and probably the attention bestowed by that people on the *syenites* (which word see) occasioned them to neglect, for a long while, the *porphyrites*, according to which opinion, works in the latter substance cannot be traced back to any very remote antiquity. If, indeed, it be admitted that a few specimens of porphyry statues of Egyptian workmanship actually exist, the very small number of these relics go a good way to bear out Winckelmann's theory.

The mixture, in this stone, of red (or rather purple) and white seems to have been disapproved of by the ancient Grecian and Roman artists in a great degree, and considered unfit for statues of high pretension. Pliny, after having related that Pallio, governor of Egypt, had presented to the emperor Claudian certain statues of porphyry, which were transported from Egypt to Rome, adds that they were regarded rather in the light of a fanciful novelty than as possessing intrinsic excellence.

Notwithstanding these objections, the porphyry of the ancients is undoubtedly a most elegant mass, of structure both firm and compact, remarkably heavy, and of a fine strong purple, variegated more or less with pale red and white; its purple is of all gradations, from claret colour to that of the violet; its variegations being rarely disposed in grains so much as in spots, sometimes very small, but occasionally running into large blotches. It is less fine than many of the ordinary marbles; but excels them all in hardness, and is capable of bearing a high polish. It is still found in immense *strata* in Egypt. The hard, red-lead coloured porphyry, variegated with black, white, and green, is a most beautiful and valuable substance. It possesses the hardness and all the other characteristics of the oriental porphyry; and even greatly excels it in the brightness and variety of its tints. It is found in great plenty in the island of Minorca, and is well worth importing, being greatly superior to all the Italian marbles. The hard, pale-red porphyry, variegated with black, white, and green, is of a pale flesh colour, often approaching to white. It is variegated in blotches, from half an inch to an inch broad, takes a considerable polish, and emulates all the qualities of the oriental porphyry. This is found in huge veins in Arabia Petræa and Upper Egypt; and in separate nodules in Germany, England, and Ireland.

Ficorini takes notice of two exquisitely fine columns of black porphyry in a church at Rome. In Egypt there are three celebrated obelisks or pillars of porphyry; two at Alexandria, and the third near Cairo. The French call them *aiguilles*, and among ourselves they are termed *Cleopatra's needles.*

The art of cutting porphyry, practised by the ancients, appears to be now quite lost. Indeed it is difficult to imagine what kind of tools they employed wherewith to fashion those huge columns and other porphyry works, in some of the ancient Roman buildings. A tomb of Constantia, daughter of Constantine, is one of these remains, and still entire. It is commonly called the tomb of Bacchus, and is in the church of St. Agnes. In the palace of the Tuilleries there is likewise a bust of Apollo, and of the twelve emperors, all in porphyry. Some ancient pieces seem to have been wrought with the chisel, others with the saw, others with wheels, and others again gradually ground down with emery: yet modern tools will scarcely touch porphyry. Dr. Lister, therefore, thinks (*Phil. Trans.* No. 203), that the ancients must have had the secret of tempering steel better than we; and not as others

have advanced, that they possessed means of softening the porphyry; though, on the other hand, it is probable that time and air have contributed to increase its hardness. Mr. Addison states his having seen a workman at Rome engaged in cutting porphyry; but his advances were extremely slow, and, in fact, almost insensible. The Italian sculptors work the pieces of old porphyry columns still remaining (for their quarries are long since lost), with a brass saw without teeth. With this saw, emery, and water, they rub and wear the stone with infinite patience. Many persons have endeavoured to retrieve the ancient art; and particularly Leon Baptista Alberti, who, searching for necessary materials for temper, says he found goat's blood the best of any; but even this availed not much; for, in working with chisels tempered therewith, sparks of fire were thrown off much more abundantly than pieces of the stone. The sculptors were thus, however, able to make a flat or oval form; but never could attain to any thing like a figure.

In the year 1555, Cosmo di Medicis is said to have distilled a water from certain herbs, by help of which his sculptor, Francesco Tadda, gave his tools such an admirable hardness, and so fine a temper, that he performed some most exquisite works with them, particularly a head of Christ, in *demi-rilievo*, together with those of Cosmo and his duchess. The very hair and beard, how difficult soever, are here well executed, and there is nothing at all superior, in these respects, in ancient art; but the secret appears to have died with him. The French have discovered another mode of cutting porphyry—namely, with an iron saw destitute of teeth, *grez* (a kind of freestone pulverized), and water. The inventors of this method say, that they could form the whole contour hereby, if they had matter to work on. Others have proposed to harden tools to cut porphyry by steeping them in the juice of the plant called *brankursine*, or *bear's breech*. *Birch's Hist. R. S.* vol. i. p. 238; vol. ii. p. 73, &c. Mr. Boyle says, that he caused porphyry to be cut by means of emery, steel saws, and water; and observes that in his time the English were ignorant of the manner of working porphyry, none of them undertaking to cut or polish it.

Da Costa supposes, and perhaps with reason, that the method used by the ancients in cutting and engraving porphyry was extremely simple, and that it was performed without the aid of any scientific means since extinct. He imagines that, by unwearied diligence, and with numbers of common tools, they rudely hewed or broke the stone into the intended figures, and by continued application reduced them into more regular designs; that they then completed the work by polishing it, with great labour, through the aid of particular, hard sands found in Egypt. And he thinks that in the porphyry quarries there were layers of grit, or loose disunited particles, analogous to the porphyry, which they carefully sought for, and employed for this purpose. See *Nat. Hist. of Fossils*, p. 285.

Portal. [*portail*, Fr. from *porta*, a gate, Lat.] *In architecture.* The lesser gate where there are two at an entrance, of different dimensions; or perhaps, more properly speaking, the arch, whether of joiner's work or masonry, over the door or gate.

Portici. *In architecture.* A palace of the king of Naples, six miles from the capital. It is situated on the seaside, near Mount Vesuvius, and embellished with a quantity of interesting relics of antiquity discovered in the ruins of Herculaneum and Pompeii; such as frescoes, statues, &c. The Portici Museum comprises sixteen rooms, in which the various articles are arranged by the hand of a refined taste. The floors are paved with musaic, taken from the recovered towns, and the walls of the court are lined with inscriptions. Independently of paintings, statues, busts, medals, intaglios, lamps, tripods, &c. there is scarcely any article that was in use among the ancients, a specimen of which is not comprehended in this interesting collection. But perhaps the most valuable room of all is the library, on account of the numerous MS. rolls contained therein. Speaking of the wonders of the Portici Museum, Mr. Mathews observes, in his entertaining work, the *Diary of an Invalid*:—"The museum consists principally of specimens of the paintings found at Pompeii. These remains are very interesting, as illustrative of the state of the art amongst the Romans; but it would be ridiculous to take the paintings on the walls of the houses of a provincial town as the standard of their skill.

"It is fair to suppose, that the taste of the ancients was as refined and fastidious in painting, as in the sister art of sculpture; and that the praises which they have lavished upon Zeuxis and Apelles, would have been supported by their works, if these works had come down to us.

"All traces of these great masters are lost; but we know some of the most ad-

mired pieces of the latter were brought by Augustus to Rome; and Pliny's descriptions, which do remain, seem to demonstrate that they must have been executed in a much higher style of finishing, and with a technical knowledge, that will in vain be sought in the painted walls of Herculaneum and Pompeii. Many of these, however, are designed with great taste, grace, and feeling; and, if we suppose that the works of Zeuxis and Apelles were as superior to these, as the *Last Judgment*, and the *School of Athens*, are to the painted walls of a modern Italian room, we shall probably not form too high an estimate of the excellence of the great masters of ancient art. One of the most elegant figures in this museum, is the picture of a female, with a pencil and tablets in her hand, which they call Sappho. The story of the picture is often plain, as in that of Orestes, Pylades, and Iphigenia, in the temple of Diana.—In another there is an old woman selling Cupids to a young female, behind whom stands a sort of Duenna, in the attitude of advice and caution. The old retailer of loves holds a fluttering Cupid by the wings, and has another in her cage.

"We have also a specimen of their taste in caricature. A little delicate chariot, that might have been made by the fairies' coachmaker, is drawn by a parrot, and driven by a grasshopper. This is said to be a satirical representation of Nero's absurd pretensions as a singer and a driver; for Suetonius tells us, he made his debut on the Neapolitan theatre:—*Et prodiit Neapoli primum: ibidem sæpius et per complures cantavit dies.*

"Here is a curious picture of a schoolmaster's room, with an unhappy culprit horsed on the back of one of his fellows; precisely as the same discipline is administered in many parts of England at present.

"Many articles, even of food, are to be seen preserved in a charcoal state. There is a loaf of bread on which the baker's name is still visible.

"It is easy to recognise the different fruits and vegetables, corn, rice, figs, almonds, walnuts, beans, lentils, &c. They show you also the remains of a woman, found among the ashes, the skull of which is still perfect; with the necklace and bracelets of gold, which she must have had on. Time has hardened the liquid shower which overwhelmed her, recording that she perished in the prime of youth, by the impression that remains of her beautiful bosom.

"The only relic of the temple of Isis is a priapic goblet; from the spout of which it is plain that the votaries must have quaffed the wine."

Portico. [Italian, from *porticus*, Lat.] *In architecture.* A continued range of columns, covered at top in order to serve as a shelter from the weather; also a common name for buildings which had such covered walks supported by pillars. Having these distinctions, when the portico was on the outside of the structure, it was called *peripterium*, and when in the inside of a hall, court, &c. *peristylium*, the place for walking, *porticus*. Among the ancients these were highly ornamented, and of great extent. The remains of the portico at Palmyra (see that word) show it to have been full four thousand feet long. There was a square portico at Athens, adorned with Corinthian columns, and a great variety of excellent paintings, and thence called Pœcile (see Pœcile.)—A piazza encompassed with arches supported by pillars, the roof of which is sometimes vaulted, sometimes flat. Among modern porticoes, those of the grand façade of the Louvre and of the great court of the Hospital of Invalids at Paris, and that at Greenwich Hospital, in our own country, deserve to be particularized.

Portland Stone. A well known species of free sand-stone, produced from a peninsula so called in Dorsetshire, and greatly employed in London as well as various provincial towns, for building the finest structures. It is not equal however to Bath stone in beauty or freeness of working, but is more durable.

Portland Vase. A celebrated funeral vase, which was long in the possession of the Barberini family, but was purchased for one thousand guineas by the late Duke of Portland, from whom it derives its present name. Its height is about ten inches, and its diameter, where broadest, six. There are a variety of figures upon it, of most exquisite workmanship, in *basso rilievo*, in white opaque glass, raised on a ground of deep blue glass, which appears black except when held against the light. It appears to have been the work of many years, and there are antiquarians who date its production several centuries before the Christian era, as sculpture unquestionably declined since the time of Alexander the Great.

Respecting the purpose of this vase, and what the figures on it were meant to represent, it would be unavailing to conjecture. Dr. Darwin dissents from the opinion that it was made for the ashes of some particular individual, and the sub-

ject of its embellishments are most probably of a general rather than a private nature.

In one compartment, three exquisite figures are placed on a ruined column, the capital of which is fallen, and lies at their feet among other disjointed stones: they sit under a tree on loose piles of stone. The middle figure is that of a female in a reclining and dying attitude, with an inverted torch in her left hand, the elbow of which supports her as she sinks, while the right hand is raised and thrown over her drooping head. The figure on her right hand is a man, and that on her left a woman, both supporting themselves on their urns, and apparently thinking intensely. Their backs are to the dying figure, towards whom, however, their faces are turned, although without their making one effort to assist her. On another compartment of the vase is a figure coming through a portal, and going down with extreme timidity into a darker region, where he is received by a beautiful female, who stretches forth her hand to help him: between her knees is a large and playful serpent. She sits with her feet towards an aged figure, who has one foot sunk into the earth, and the other raised on a column, with his chin resting on his hand. Above the female figure is a Cupid preceding the first figure, and beckoning him to advance. This first figure holds a cloak or garment, which he seems anxious to bring with him, but which adheres to the side of the portal through which he has passed. In this compartment there are two trees, one of which bends over the female figure, and the other over the aged one. On the bottom of the vase there is another figure on a larger scale than that we have already mentioned, but not so well finished nor so elevated. This figure points with its finger to its mouth. The dress appears to be cumbersome and curious, and above is the foliage of a tree. On the head of the figure there is a Phrygian cap: it is not easy to say whether this figure be male or female. On the handles of the vase are represented two aged heads with the ears of a quadruped, and from the middle of the forehead rises a kind of tree without leaves. These latter are in all probability mere ornaments, and have no connexion with the rest of the figures, or with the story represented on the vase.

Portrait. [from the verb *to portray*.] *In painting*. The representation of a person, or more particularly of a face, taken from real life. Portraits are either full length, half length, &c. and when as large as the life are generally painted in oil colours: sometimes they are executed in miniature with water colours, crayons, pastils, &c. See Painting, and the article now following.

Portrait Painting. This is a very important branch of the art, as will be obvious on the least consideration: for, since the human face is allowed on all hands to form the grand vehicle of expression, and to contain indeed traits whereby the actual character of the individual may be defined, it necessarily arises that a just and intellectual representation thereof must constitute a work of art not interesting alone to the circle of friends by whom any particular person is cherished, but in itself highly curious, and demanding powers in the artist, not merely of hand but of head—not only skill in drawing and colouring, but mind sufficient to comprehend and tact sufficient to call out and mark all those more delicate gradations which discriminate characters and expressions, in their broad features, and to a vulgar eye, almost synonymous. The portrait painter should be a physiognomist; and that not in the more general and superficial sense of the term, but decidedly and scrupulously; for otherwise, particularities will be likely to escape him which a study and knowledge of that science would suffice to occasion his observation of. Even admitting that physiognomy is altogether a fallacious pursuit (which we do only for the sake of putting a case); suppose that its theory is built upon sandy foundations, and its practice, as it has before now been stigmatized, pernicious from its liability to mislead: even were all this granted, still the very pursuit itself would be serviceable to the portrait painter: since it would infallibly *direct his attention* to those nicer traits of countenance, which if they lead to no reasonable deduction, yet form a very considerable portion of the individuality, strictly speaking, of the person represented.

But portrait painting is not to be by any means confined to the representation of single and isolated faces; it enters into the higher department of historical painting, wherein actual portraits are frequently introduced, and wherein one of the greatest charms, generally speaking, arises from the power of depicting with accuracy and force the various passions communicated from the heart and imagination to the faces of men. See Passions. In this point of view all the great painters of historical subjects may be denominated portrait painters; and we know of few more

desirable acquirements for the student who is ambitious of excelling in history than a thorough, nay, a practical acquaintance with the principles of actual portrait painting.

Who does not feel anxious to have as it were a personal acquaintance with those illustrious personages, whose names illumine the pages of history, and whose actions excite in the generous breast at once admiration and emulation? Who does not glow with pleasure on viewing the likeness of Cæsar, of Milton, of *Henri Quatre,* and the other great and estimable men whom succeeding ages have held up for the applause or instruction of the world? What fond regrets have been expressed, and how many more have been felt, that we possess no surer likeness of Alfred—the truly *Great,* and the deserved favourite of our history; or of Shakspeare, one of the kindest as well as wisest sons of humanity? The skill of the portrait painter enables us to stand face to face with the objects of our interest, and if the expression on their countenances is still and unchanging, it is at the same time perpetual, and subject neither to the accidental dimming of angry and unworthy passions, nor to the fading touch of time. It haply remains young while we grow old, and constitutes a charm whereby our earlier and later years are linked together.

Portrait is a very favourite branch of the art in this country, and highly cultivated. That it should be so is, in fact, not matter for surprise, since its practice is decidedly more lucrative than that of any other kind of painting. The present president of the Royal Academy (Sir Thomas Lawrence) is a portrait painter; and it is in the same walk of art that the great name whose owner first filled that honourable chair obtained its highest celebrity. The portraits of Sir Joshua Reynolds have been alluded to and characterized in our article on PAINTING (which see). He was a worthy follower and rival of Van Dyck, whose reputation is superlative in this division of art. The spectator of one of the portraits of Van Dyck or Reynolds is interested and excited in despite of his probable ignorance of the party represented. He beholds a sketch on canvass which appears almost animated with life; and if the head be a fine one in itself, he has, and enjoys, the privilege of gazing uncontrolled upon one of the most noble achievements of creation—an intellectual countenance. He views, or imagines, in the curve of the lip and the play of the eyes, the germs of those characteristics which distinguished the living person, and feels that the painter by his "so potent art" effectually bids defiance not only to time but to mortality. How much then is the charm enhanced to the eye of affection! who would part with the portrait of one who had been dear to them, and has been abstracted from human society by the all-devouring grave? We shall be pardoned for quoting on this subject the lines of the amiable and elegant Cowper, *On Receipt of his Mother's Picture.*

"Oh, that those lips had language! time has past
With me but roughly since I saw thee last!
Those lips are thine—thy own sweet smile I see,
The same that oft in childhood solaced me.
Voice only fails—else how distinct they say,
Grieve not, my child, wipe all thy tears away.
The meek intelligence of those dear eyes
(Blest be the art that can immortalize!
The art that baffles time's tyrannic claim
To quench it) here shines on me still the same."

A most happy revolution has been wrought of late years, in this country, in the art of portrait painting. We no longer see young ladies stuck upon the canvass, grinning with all their might, and holding in one hand a great bunch of flowers; nor family pieces resembling that so well described (we cannot say caricatured) by Dr. Goldsmith in his exquisite novel of the *Vicar of Wakefield*—the vicar *loquitur*:—"My wife desired to be represented as Venus, and the painter was requested not to be too frugal of his diamonds in her stomacher and hair. Her two little ones were to be as Cupids by her side, while I, in my gown and band, was to present her with my books on the Whistonian controversy. Olivia would be drawn as an Amazon sitting upon a bank of flowers, dressed in a green Joseph richly laced with gold, and a whip in her hand. Sophia was to be a shepherdess, with as many sheep as the painter could put in for nothing, and Moses was to be dressed out with a hat and white feather." The fact is that the customary daily habits both of look and deportment are infinitely the most desirable whenever they can be acquired, and hence the superior truth and reality of those likenesses which are taken when the party is not himself aware. People are known and recognised almost as much by their predominating gait and expression as by their actual features, and consequently the habit so much practised by sitters of *making themselves up,* as it may be termed, for the occasion, cannot be too much decried by the critic, and guarded against by the artist, whose eyes should dive, as it were, into the very recesses of the sitter's soul, and divest him of his

flesh-and-blood mask either by penetrating glances or easy and familiar discourse. Let us repeat that it is not the *accidental* but the *prevalent* and *genuine* characteristics of the face that are to be seized and perpetuated. It is necessary to be remarked, also, that the position of the head should accord with the peculiar character of the countenance. There is more in this than may at first sight be imagined:—it would appear perfectly ridiculous, for instance, to place the head in a position indicative of defiance or pride upon the shoulders of a person whose physiognomy denoted the milder and more modest graces. We know of few things connected with personal bearing more decisive of manners and disposition than the carriage of the head. To *hold up one's head in the world* has passed into a proverb, and the various gradations and modifications of this faculty are well worthy of the artist's serious observation.

With respect to color, the same rules must be observed as hold in all other kinds of painting. The *chiaro-scuro* should be carefully studied and maintained; and it may be as well to observe, that certain different kinds of light are calculated to give effect to different species of countenance. Some require to be viewed in a stronger shade than others, and *vice versa*. The powerful light used with such striking effect by Rembrandt should be dealt with in a very cautious and wary manner. The artist should endeavour to shun any thing like mere masses of colours, which should be blended together with great nicety and harmony.

Among the ancients, portrait was amalgamated into historical painting—the most celebrated practisers of the former having also the highest names in the latter department of art. After the revival of art among the moderns, it was a long time before portrait painting began to be considered as a separate pursuit. Raffaelle, Titian, Holbein, Albert Durer, Le Tintoretto, Paolo Veronese, all distinguished themselves in painting portraits, and are at the same time the greatest names in historical painting*.

On this particular department of the art, the following authors are proper to be consulted:—The 2d chap. of the 3d book of Precetti della Pittura of Giov. Armenini. Livre de Portraiture, by Annibale Caracci, with 30 plates engraven by Poilly. Livre de la Vrai Science de la Portraiture, décrite et démontrée, by Jean Cousin, Paris, 1589, 4to. 1635, 4to. A corrected edition of this book appeared in 1766, in 4to. Elémens de Portraiture, by the Sieur de S. Igny, Paris, 1630, 12mo. with engravings. Livre de Portraiture contenant, par une facile Instruction, plusieurs Plans et Figures de toutes les Parties séparées du Corps humain, recueillies des plus excellens Peintres de toute l'Italie, by Jean Le Clerc, Paris, 1640, 36 sheets, 4to. Livre de Portraiture, according to Le Brun, by Simoneau, 28 sheets. Another work under the same title, in 14 sheets, by the same. Les Premiers Enseignemens de la Portraiture pour la Jeunesse, ou autres qui s'y voudront adonner, par A. Bosse, 8vo. We find also a tract on this subject in the Recueil de quelques Pièces contenant les Arts, Paris, 1757, 12mo. Sur le Mérite du Peintre Portraitiste (in German), by Joseph de Sonnenfels, Vienna, 1768, 8vo. In the work of A. Bosse, entitled—Des Sentimens sur la Distinction des diverses Manières de Peinture, Dessin, et Gravure, Paris, 1649, 12mo. will be found a chapter called—Des Chemins pour arriver promptement et facilement à bien portraire. The 7th book of the Grand Livre des Peintres, of Lairesse, is entirely devoted to portrait painting. We find, likewise, in the Cours de Peinture par Principes, by De Piles, a number of observations on the same subject—including remarks on the question whether it is proper to correct natural defects of complexion, &c. in portraits, &c. The most intelligent and instructive observations on portrait painting, in our own language, are to be found in the works of Richardson and Reynolds.

We shall now proceed to cite several collections of ancient Greeks and Romans, after engraved stones, medals, busts, and other undoubted authorities. Jacobi Mazochii, Imperatorum et illustrium Virorum Imagines ex antiquis Numismatibus, Rome, 1517, 8vo. Joan. Huttichii, Imperatorum tam Græcorum, quam Latinorum, Fœminarum et Tyrannorum Icones, Argentorati, 1525; Lugd. Bat. 1559, 1554, 8vo. Jacobi de Strada, Thesauri Antiquitatum Epitome, hoc est Imperat. Romanorum oriental. et occidental. Icones ex antiquis Numismatibus, Lugduvi Batavorum, 1553, 4to. Rome, 1557, 8vo. Tigur. 1559, folio; and in French, by Louveau, Lyons, 1553, 4to. Gulielmi Ruillii, Promtuar. Icon. insignior. a Sæculo Hominum, Ludg. 1553, 2 vols. 4to. Le Imagine delle Deane Au-

* The Romans gave the name of *statuæ iconicæ* to those statues which represented a man in his actual personal likeness and proportions. Suetonius denominates them *simulacra iconica*, and Atheuæus uses an analogous Greek term.

guste, da Enea Vico, Venice, 1557, 4to. Reliquæ Augustarum Imagines a Plotina ad Saloninam, edente Jacob. Franco, Ven. 4to. Huberti Goltzii, Icones Imperatorum Romanorum ex prisc. Numismat. Brug. Fland. 1558, folio, and Antwerp, 1645, folio. Insignium aliquot Virorum Imagines, Lugd. 1559, 8vo. This work comprises the portraits of one hundred and forty-three philosophers and men of letters who have flourished since the time of Constantine the Great, all of which however cannot be considered quite authentic. Illustrium Virorum ut extant in Urbe, expressi Vultus, Rome, 1569, 4to. These portraits are engraved by Augustin Veneto. This work appeared some years after, under the title of Imag. et Elog. Virorum illustr. ex Bibliotheca Fulvii Ursini, 1570, folio; and was again reprinted, with additions, under the name of Illustr. Imag. ex Antiq. Mam., Numism. et Gemmis; Theodorus Gallæus delin. et incid. Antwerp, 1598, 4to. The same was translated into French by Bandelot, Paris, 1710, 4to.; and again, modified anew by Bellori, was published under this name:—Imagines veterum illustrium Philosophorum, Poetarum, Rhetorum, et Oratorum, Rome, 1685, 3 vols. folio. Illustrium Philosoph. et sapientium Effigies ab eorum Numismat. extract. Ven. 1580, 4to. Portraits et Vies des Hommes illustres Grecs, Latins, et Payens, par André Thevet, Paris, 1584, 2 vols. folio, and 1671, 8 vols. 8vo. Imagines XXIV. Cæsarum a Julio ad Alex. Severum ab antiquis Marmoribus, Ven. 1585, folio. L. Hulsii, Effigies XII. priorum Cæsarum et LXIV. ipsor. Uxor. et Parent. Francofurti, 1597, folio. XII. Cæsarum Romanorum Imagines ex Numism. e Museo Fr. Swertii, Ant. 1612, 4to. Iconografia, civè Disegni d'Immagini, cav. per Giov. Angel. Canini da Frammenti di Marme, da Gioje e Medaglie, Roma, 1669, folio. The same work has also appeared under the following title:—Les Images des Héros et grands Hommes de l'Antiquité, drawn by Canini, and engraved by Messrs. Picart and Vallet, Amst. 1731, 4to. In this are five hundred portraits. Effigies Romanorum Imperatorum ex antiquis Numism. Reg. Christinæ, del Pet. Aquila Panormitanus, Rome, 1681, fol. Effigies Virorum ac Fœminarum illustrium quibus in Græcis aut Latinis Monumentis aliqua Memoriæ Pars datur, Lugd. Batav. apud Petrum Vander-aa, 4 vols. fol. Illustr. Virorum, Philosophorum, Oratorum, et Icones ex Marmor. antiquis del. a P. F. Rubens, sculpt. a Lud. Vorstermann, P. Pontio, &c. 12 excellent plates, fol. Lud. Patarol, Series August. Augustar. Cæsarum ed Tyrann. a Jul. Cæsare ad Carol. VI. Ven. 1740, 8vo. Henrici Spoor, Favissæ utriusque Antiquitat. tunc Rom. quam Græc. in quibus reperiuntur Simulacra Deorum, Icones magnorum Ducum, Poetarum, &c. Ultraj. 1707, 4to. These portraits, to the number of a hundred, are executed after engraved stones, but the greater part are to be found in the work of Canini. Raccolta dei Busti degli Imperat. Romani, delle Donne illustri, dei Filosofi, &c. esistenti nella Galleria di Firenze, 1779, 4to. Galerie des anciens Grecs et Romains, by Th. Fr. Riedel, Augs. 1780, 4to. (in German) 24 sheets.

Amongst those works which contain portraits of the emperors and kings of Germany, we will mention:—Brief Description and faithful Portraits of the Emperors, Kings, and other illustrious Personages of both Sexes, Frankfort, 1538, 4to. (in German.) Portraits of the Roman Emperors, their Wives and Children, Zurich, 1558, 8vo. J. B. De Cavallerius, CLVII. Imperat. et XXXI. Pontif. max. Imagines, Rome, 1585, 8vo. August. Imperat. Regum, atque Archid. illustr. Principum verissimæ Imagines, Jo. B. Fontana delineavit, D. Custodi sculp. Œnip. 1601, fol. Aquila Romana ovvero la Monarchia Occident. da Carlo M. in fino alla Coronal. di Leopoldo I. da Palazzi, Venet, 1679, fol.

Portraits of the kings of France:—Portraits des Rois de France depuis Pharamond jusqu'à Henri III. par Virg. Solis, et J. Amman, Nor. 1566. Les vrais Portraits des Rois de France, depuis Clovis jusqu'à Louis XIII. par Jacques de Bie, Paris, 1634, fol. Les Vrais Portraits des Reines de France, by the same, fol. with sixty portraits. Monarchie Française, ou Recueil Chronologique des Portraits de tous les Rois et des Chefs des premières Familles depuis Pharamond jusqu'à Louis XV. par Gautier d'Agoly, fils, Paris, 1770, 4to.

Portraits of various sovereigns and princes of Europe:—Reg. Neapolit. Vitæ et Effigies, Auct. B. C. Aug. Vindel. 1663, folio. Portraits de tous les Rois de Suède, Nuremb. 1707. Jac. a Mellen, Series Regum Hungariæ, e Nummis aureis quos vulgo Ducatos appellant; Lub. 1690, 4to. Icon. et Hist. Principum et Regum Poloniæ a Neuerbauero, 4to. Portraits de tous les Grand Ducs, Electeurs, Ducs et Princes de la Maison de Saxe, par N. J. Agricola, Witt. 1563, 8vo. Nic. Reusneri, Icones Imperatorum, Regum, Prin-

cipum, Electorum et Ducum Saxoniæ, Jenæ, 1597, fol. Austriacæ Gentis Imagines, Œnop. 1659, fol. Regiæ Familiæ Mediceorum, Etruriæ Principum, Imagines, by Francis ALEGRINI, 50 sheets, augmented under the title of Cento Ritratti della Real Famiglia de' Medici, 1762, fol. Icones Ducum et Gubernatorum Lotharingiæ, Brabantiæ, Limburgi, 1669, 51 sheets, 4to. Portraits des Princes, Comtes, et Ducs de Savoie, fol. 33 sheets. Principes Hollandiæ et Westfrisiæ ab anno 1553, by P. SOUTTMANN, and C. FISCHER, 1650, fol. 40 sheets. Les véritables Portraits de quelques Princes qui ont vécu du temps de la Réforme en 1562. Effigie Naturali de' Maggiori Principi e più valorosi Capitani, di Andrea VACCHARIO, Rome, 1597, fol. Portraits des Princes, Seigneurs, et Personnes illustres, by MONTCORNET, Paris, 1680, fol.

Collections of portraits of illustrious men of all nations:—Icones quinquaginta Virorum illustrium, per Thom. DE BRY, Francofurti, 1569, 5 vols. 4to. The same work under this title:—Bibliotheca Chalcographica, Franc. 1650, 4to. Ph. GALLEI, Effigies XLIII. Virorum Doctorum de Disciplina bene merentium, Antwerp, 1572, 4to. La Prosopographie, ou Description des Personnes insignes, par A. Du VERDIER, Lyons, 1605, 3 vols. folio. Imagines Virorum illustrium (without date) containing 104 prints. Monum. Sepulcror. cum Epigr. Ingenio et Doctrina excellentium Virorum, per Tobiam FENDT, Amst. 1638, fol. with 125 portraits. P. JOVII, Elogia Virorum Litter. illustr. ad vivum expressis Imagin. exornata, Basil, 1577, fol. with 63 prints. Musei JOVIANI, Imagines ad vivum expressæ, Basil, 1577, 4to. We may regard as an appendix to this work, the following:—Joan IMPERIALIS, Museum Historicum, Venet. 1640, 4to. with 57 sheets. Icones Virorum nostra Patrumque memoria illustrium ab Henrico HONDIO, sculpt. 1599, 4to. Icones LXXXIV. Virorum eruditorum Seculi XV. et XVI. Flor. Val. Andreæ DESSELII, Imagines Doctorum Virorum, è variis Gentibus, Antwerp, 1611, 12mo. with 73 portraits. Nicolai REUSNERI, Icones sive Imagines Virorum Litteris illustrium, Strasb. et Bâle, 1587 and 1589, 8vo. Opus Chronographicum Orbis universi à Mundi Exordio usque ad annum MDCXI. continens Historiam, Icones, &c. Summorum Pontificum, Imperatorum, Regum, ac Virorum illustrium, autore Pet. OPMEERO and Laur. BEYERLINCK, Antwerp, 1611, 2 vols. fol. containing nearly 500 portraits. Icones CX. Principum, Virorum doctorum, Pictorum, Chalcograph. Statuar., &c. ab Ant. VAN DYCK, ad vivum expressæ, Antwerp, 1646, folio. The same, thus called—Le Cabinet des plus beaux Portraits, Anvers, 100 sheets (without date). Again the same, entitled—Iconographie, ou Vies des hommes illustres du XVII. siècle, par M. V., Amst. 1759, fol. Decem pictæ Effigies, ab Antonio VAN DYCK, Æri incisæ a Petr. VAN GUNST, 1716, fol. Principum et illustrium quorundam Virorum Imagines, Lugd. Batav. (without date) 97 sheets. Imagines XLI. Virorum celebrium in Politic. Histor. ib. (undated) fol. XXV. Portraits des Hommes célèbres, ib. (undated). Images de divers Hommes d'Esprit, par Jean MEYSSENS, Anvers, 1649, 4to. Portraits des Peintres, Graveurs, et Hommes d'Esprit sublimes par leur Art et Savoir, engraved by HOLLARD, Anvers, 1649, folio. Lor. CRASSO, Elog. d'Uomini Letterati, Ven. 1666, 2 vols. 4to. 142 portraits. Icones Virorum illustrium à Mathia Von SOMMERN Æri incisæ. Ratisb. 1667, fol. Académie des Sciences et des Arts, contenant les Vies et les Eloges Historiques des Hommes illustres depuis environ quatre siècles parmi diverses Nations de l'Europe, par Is. BULLART, Paris, 1681, 2 vols. fol. Pauli FREHERI, Theatrum Virorum eruditorum clarorum, Norimb. 1688, fol. 4 vols. with 1312 portraits. Portraits de célèbres Hommes et Femmes François, Hollondais, et Allemands, par MONTCORNET and MARIETTE, fol. 131 portraits. Jacobi BRUCKERI, Pinacotheca Scriptorum nostra Ætate Litteris illustrium, Augustæ Vindelic. 1755, 2 vols. fol. engraved by J. J. HAYD. A Supplement to this Gallery at Augsburgh, 1766, fol. containing 11 sheets. L'Europe illustre, enrichie de Portraits gravés par ODIEUVRE, Paris, 1777, 6 vols. 4to. each volume containing nearly 100 portraits. The same author has since published a Catalogue des Portraits des Princes, Personnes illustres, et des Savans, Paris, 1742, 8vo. Galerie Historique Universelle, par M. de PUJOL, comprised in a suite of 1000 portraits of men and women celebrated in ancient and modern history, Paris, 1787, 4to. Galerie Universelle des Hommes qui se sont illustrés depuis le siècle de Léon X., par le Comte de PLATIERE. Collection de Portraits des Hommes illustres vivans, Paris, 1788, folio. Galerie Historique des Hommes les plus célèbres de tous les Siècles et de toutes les Nations, contenant leurs Portraits gravés au trait d'après les meilleurs Originaux, avec l'Abrégé de leurs Vies, et des Observations sur leur Caractère et sur leurs Ouvrages, publish-

ed by C. P. Landon. This work extends to 10 or 12 vols. 12mo. each containing 72 portraits. Portraits des Hommes illustres du dix-septième Siècle, gravés par Edelinck, Lubin, and Van Schuppen, accompanied by an abridgment of the lives of the persons represented, Paris, fol. P. Jovii, Elogia Virorum Bellica Virtute illustrium, ad vivum expressis Imaginibus exornata, Basil. 1596, fol. Ritratti di cento Capitani illustri, Intagl. da Aliprandi Capriolo, Rome, 1600, 4to. Ritratti di Capitani illustri, da Rosc. Mascardi, Leonida, et Tronsarelli, Rome, 1646, 4to. Les Portraits des Plénipotentiaires assemblés à Munster et à Osnabruck, gravés par François Bignon, fol. 33 sheets. Pacificatores Orbis Christiani, Rotterdam, 1697, fol. 131 sheets. Icones: id est, veræ Imagines Virorum, Doctrina simul et Pietate illustrium, Theo. Beza autore, Gen. 1558, 4to. 38 portraits. Veterum aliquot et recentiorum Medicorum Philosophorumque Icones ex Bibliotheca, J. Sambucci, Antwerp, 1574 and 1663, fol. 64 portraits. XX. Icones clarissimorum Medicorum Philosophorum, Leyden, fol. Histoire des Philosophes Modernes, par M. Saverien, avec leurs Portraits dans le Goût du Crayon, par M. François, Paris, 1759, 7 vols. 4to. 60 portraits. Illustrium Jureconsultorum Imagines ex Museo Marci Mantuæ Benavidii, Rome, 1564, 4to. Venet. 1569, 4to.

Portraits of illustrious Englishmen:—Heroologia Anglica, hoc est, Clarissimorum Anglorum qui floruerunt ab anno Christi 1500 usque ad præsentem annum 1620, Vivæ Effigies, Impens. Crisp. Passæi, 2 vols. fol. 64 sheets. A Collection of Portraits of the Court of Henry VIII. etched by Dalton, folio, with 56 portraits. Houbraken and Vertue's Heads of illustrious Persons of Britain, with their Lives, by Thos. Birch, London, 1751, 2 vols. fol. with 108 portraits. A Biographical History of England, from Egbert the Great to the Revolution, disposed in different Classes, and adapted to a methodical Catalogue of engraved British Heads, by J. Granger, London, 1774, 5 vols. 4to.

Of celebrated Frenchmen:—Portraits de plusieurs Hommes illustres qui ont fleuri en France, par M. Michel, Paris, 1643, fol. Les Portraits des Hommes illustres François, dessinés et gravés par Zach. Heince et Fr. Bignon, Paris, 1650, folio, 27 sheets. Portraits des illustres Français et Etrangers, gravés par Pierre Drevet, Paris, 1652, 4to. Portraits des Hommes illustres François qui sont peints dans la Galerie du Cardinal de Richelieu, Paris, 1668, 8vo. Les Hommes illustres qui ont paru en France pendant ce Siècle avec leurs Portraits, par M. Perrault, Paris, 1700, 2 vols. fol. Galerie Française, ou Portraits des Hommes et des Femmes illustres qui ont paru en France, gravés sous la conduite de M. Restout, Paris, 1770. Les illustres Français, ou Tableaux Historiques des grands Hommes de la France, pris dans chaque Genre de Célébrité, fol. Collection complète de tous les Acteurs et Actrices célèbres dans les trois Spectacles, d'après les Dessins de M. Monet, 1770, fol. 40 sheets. Collection Générale des Portraits des Députés aux Etats-Généraux, 1789, 4to. Galerie des Portraits des Membres de l'Assemblée Constituente, 4to.

Portraits of eminent Italians:—Joannis Philippi Tomasini, illustrium Virorum Elogia Iconibus illustrata, Pat. 1630, 4to. 48 portraits. Elogia Virorum Litteris et Sapientia illustrium, by the same, 1644, 4to. 35 portraits. C. Patini, Lyceum Patavinum, sive Icones et Vitæ Professorum Patavinorum, Patav. 1682, 4to. Ritratti d'Uomini illustri Toscani, Firenz. 1766, 2 vols. fol.

We might swell our list of curious and interesting collections of portraits by inserting those of distinguished Hollanders, Danes, Spaniards, Germans, Swiss, Americans, &c. but we forbear to do this, inasmuch as the limits of our Dictionary will not conveniently afford us the requisite space.

Porus. [πόρος, Gr.] *In archaiology.* The denomination of a species of marble used by the ancients, and somewhat resembling both in colour and quality the Parian marble, and which Pausanias speaks of, as well as Theophrastus and Pliny, as having formed the substance of several fine structures. It is now unknown.

Position. [Fr. from Lat. *pono*, to put.] *In painting and architecture.* The artist disposes his model in the manner best calculated to answer the peculiar end he has in view in his painting, and should always bear in mind that those positions are the best which are the most natural and least overstrained, and in Portrait Painting (which refer to) those which most clearly express the habitual bearing of the individual.

In architecture, we talk of the *position* of a building with reference to the points of the horizon.

Post. [*poste*, Fr.] *In architecture and sculpture.* This term is used to express certain ornaments shaped after the manner of rolls or wreathings. It also de-

notes a piece of timber, or stake, set erect in the earth.

POSTERN. [Fr. *poterne*, Lat. *posterus*, from *post*, behind.] *In architecture.* A small gate or little door at the back of a building.

POSTICUM. [Lat.] The porch in the back front of an ancient temple.

POSTSCENIUM. [Lat. *post* and *scena.*] *In archaiology.* The back part of the theatre where those things were managed which were unfitted for the more prominent parts thereof, where the actors retired to robe themselves, and where a part of the machinery was deposited.

POSTURE. [Lat. *positura.*] See POSITION.

POVERTY. [Fr. *pauvreté.*] *In emblematical painting*, &c. The iconologists have represented poverty as pale, unquiet, badly clothed, and in a humiliating posture. In the *Triumph of Poverty*, painted by Holbein, she is seen under the traits of an old woman, haggard, and seated on a bundle of straw. The car on which she is borne is dilapidated in sundry places, and drawn by a horse and an ass both in sad plight.

PRÆCINCTIS. [Lat. *præcingo*, to gird about.] *In archaiology.* In the ancient theatres and amphitheatres, this name was applied to a sort of wide seat, or rather step, which served to facilitate the moving of the spectators round the entire inner circumference of the building. The name of *balteus* was appropriated to the same thing.

PRÆTORIAN CAMP. *In the archaiology of architecture.* The Prætorian Camp was, as its name imports, designed for the purpose of assembling within the same enclosure all the troops subjected to the power of the prætors. Sejanus, minister of Tiberius, occupying the station of prefect, desired that all the soldiers of the prætorian cohorts, whose quarters were dispersed about, should be gathered together and lodged in one vast edifice, which he caused to be built, and entitled *Castrum Prætorium* or rather *Castræ Prætoriana.* Antiquarians are not agreed as to the precise situation of this magnificent structure, but it is pretty evident that it stood at the eastern side of Rome, between the *ways* called *Nomentana* and *Tibertina*, behind the *thermes* of Dioclesian, and near the walls of the city. This camp or rather barrack was constructed of brick, of reticular workmanship, covered with stucco, and enriched with superb porticoes in columns. Constantine demolished it: but it appears to have been restored by the care of Ligorio. In the centre of the camp was the PRÆTORIUM (see the following article) or tribunal, at which the prefect distributed justice. This had the exterior form of a temple, but was very plain within, the most conspicuous object being a table covered with a purple cloth embroidered with gold.

The camp was surrounded by an enclosure in some places double, and more or less extensive, within which were erected, on a quadrangular plan, two stories in height, the quarters of the soldiers, between the different divisions of which vast colonnades established a facile communication. The towers placed on the outside gave to the whole of this extensive and formidable place the appearance of a fortress, and the great space withinside ensured salubrity to the troops, while it afforded them the requisite room for going through their various exercise. Messrs. DURAND and LEGRAND, in their excellent work, entitled—*Recueil et Parallèle des Edifices anciens et modernes*, have given, at pl. 26, the plan of this superb mass of building. In the same plate are exhibited the small camp of Pompeii and that of Otricoli. M. Legrand very judiciously remarks, in this respect, that a small superficies may be made to appear important by giving it unity and simplicity of form, which, far from excluding the ornamental, partakes largely of its very essence. The simplicity of the plan of the camp of Pompeii; the nobleness of the galleries encircling it, although supported by columns of a small size; the perfect preservation of the place, &c. render it an object of great interest and admiration. With these antique monuments we may mention the Hôtel des Invalides, at Paris, built by Louis XIV. for disabled soldiers, which richly decorated and altogether superb edifice passes, and justly, for one of the *chefs-d'œuvre* of Parisian architecture, and whose majestic dome may be said to rival that of St. Peter's at Rome, or our own St. Paul's.

PRÆTORIUM. [Lat. *prætor*, (*quasi præitor*, one who goes before) from *præ*, and *eo*, to go.] *In archaiology.* A place or court where causes were heard and judgment given, by the prætor. Also any patrician's seat or manor-house in the country was often so called.

PRASINUS. [Gr. πράσινος, from πρασον, a leek (owing to its green colour). This colour was one of those used to designate the four parties in the games of the Circus. These parties were denominated after the four seasons, and the *prasinus*, or green, distinguished the combatants ranged under the banner of *Spring*. There are some curious details on this subject to be

found in the excellent work of Alexander La Borde, on the *Mosaique d'Italica*, in the *Notes de Saumaise sur Solin*, (634th p.) and in different authors who have treated of these celebrated antique games.

Prayers. [Fr. *priére.*] *In painting and sculpture.* The Greeks and Romans (particularly the latter) were in the habit of offering up their prayers in a standing posture. The Greeks always commenced with benedictions, and previously to entering their temples, purified themselves with the lustral water. The Romans wore a veil on their head on these occasions, touched the altar while the priest was pronouncing the prayer, and occasionally saluted the knees of the deity before whose shrine they were bending. They ordinarily turned their bodies towards the east during the time of prayer.

The most ancient attitude was to lift the palms of the hands towards heaven, but the early Christians, after awhile, substituted that of spreading out the arms, to imitate the form of the cross.

More information may be gained on this interesting subject by consulting Buonarroti, *Vetri antichi*, p. 121; Bingham, *Origines Eccles.* v. 5. p. 267; Rechenberg, *De Cheirasia Orantium*, Lips. 1678; Calvoer, *Rituale Sacrum*, v. 2, p. 582; Hildebrand, *Rituale Orantium*, chap. 9.

Presbytery. [Gr. πρεσβυτήριον, from πρεσβυτερος, older or elder, the comparative of πρεσβυς, old.] *In architecture.* Such is the derivation of this word, from which it will be obvious that, if used for a building, it is no less suited to human persons. In the former sense it is employed among certain religious communities, to designate the residence of the priests, or *elders*, as the sages and religious persons of a town were wont to be called. In Roman Catholic countries the name is applied to religious houses near any given parish, wherein all such priests as are held to merit such distinction are received, lodged, and have food provided them in common.

Priapus. [Gr. Πρίαπος, *item membrum virile; propter magnitudinem cujus cognominatus est Priapus.*] *In mythological painting and sculpture.* The representations of this deity, held among the ancients to preside over gardens as well as over the genital parts of the sexes, are very numerous upon antique monuments, and are often found in situations which seem very inappropriate thereto, whence it appears that the Greeks more particularly were apt to introduce and familiarize themselves therewith. It is probable that they regarded the Priapus merely as an emblem of fecundity, and attached not to it (at least deemed it unnecessary to attach to it) any indecent or lascivious meaning. See Phallus. The original worshippers of this god, however (the people of Lampsacus) have been much belied if, in the festivals they held in his honour, they did not indulge in a good deal of licentiousness and impurity.

The representations of this nature which have a religious object are extremely numerous, and, as well as the worship of Priapus, have been treated of at a considerable length, and depicted in the rare work of Mr. Knight, entitled—*An Account of the Remains of the Worship of Priapus, to which is added a Discourse thereon, as connected with the Mystic Theology of the Ancients*, London, 1786, 4to.

The second class of *priapi* are likewise numerous, and must be regarded as executed with a licentious design, in order to administer to the looser ideas of the possessors or artists. Of this nature was a painting spoken of by Suetonius, which represented Atalanta exchanging caresses with Meleager, and which was left by testament to the Emperor Tiberius, under the condition that, if he thought it too voluptuous, he might take, instead, a million of sesterces. Tiberius, however, preferred the picture, which he even caused to be placed at Capreæ in his bedchamber. The ancient sculptors not unfrequently sinned in this particular way, and among the most remarkable specimens may be ranked—the *Satyr and the Goat* of the Portici Museum (which cannot be seen without a particular order of admission), and another sculpture much resembling it at Dresden, which was found at Nettuno, and sold by the Cardinal Alexander Albani to the last king of Poland. The *priapus* of the Cardinal Albani with the inscription *Salvatorem mundi*, and that of the Cabinet of Florence, have also obtained distinction. See Mr. Knight's work above referred to.

The god himself is generally represented with a human face and the ears of a goat: he holds a stick in his hand, with which he terrifies birds, as also a club to drive away thieves, and a scythe to prune the trees and cut down corn. He was crowned with the leaves of the vine, and sometimes with laurel or *rocket*, which plant was sacred to him, as it was said to raise the passions and excite love.

Priest. [id quod *presbytery.*] *In archaiology.* We cannot pretend to offer in this place, any thing like a detailed description of the numerous varieties of the sacer-

dotal office among the ancients. Those most frequently remarked upon ancient monuments are, among the Egyptians, the *pastophores* (which word see); among the Greeks, the *hierophantes*, the *pythia*, &c.; among the Romans, the *flamens* (see FLAMEN), the *camillæ*, the *popæ*, the *vestals* (see VESTAL), &c.

PRIMITIVE COLOURS. These are said to be restricted to three—namely, red, yellow and blue, from the mixtures and combinations of which all the other colours, tints, and gradations are produced. For the number of colours used by the ancients, refer to the article PAINTING.

PRINCIPAL. [Lat. *principalis*, vide *principle*.] *In all the arts.* The chief object proposed by the artist in his work, to which all others should be rendered subordinate. Unless this subordination be rigorously observed, the unity of the piece is lost, and the interest perishes with it. Thus, in painting, the main action or figure should possess not only the strongest tone of colour, but the most important and striking situation in the picture, and should unite itself with all the other objects by means simple and natural.

PRINCIPLES. [Lat. *principium*, a beginning.] *In all the arts.* By this term we designate those rules and maxims upon which an art is founded, and of which the student must make himself well informed if he is desirous of practising it.

PRINT. See ENGRAVING, PAPER, &c.

PRINTING. The act of taking impressions or *prints* from a copper-plate or woodcut, &c. on paper or any other substance. Those costly impressions which are taken off with great care are denominated, from their superior appearance, *proofs*. See PROOF.

PRISM. [Gr. πρισμα.] *In geometry.* An oblong solid, contained under more than four planes, whose bases are equal, parallel, and alike situated. If the body be triangular, it is called a triangular prism, if square, a quadrangular one.

In *optics*, or, more precisely speaking, in *dioptrics*, the prism is a triangular glass body, used in experiments respecting the nature of light and colours, which it is desirable, on every account, that the painter should obtain some acquaintance with. It does not however enter directly into the scope of the present Dictionary, and the reader is referred for a further explanation to any work on optics, or the articles in the various Encyclopædias.

PRISON. [Fr. from *prendre*, to take.] *In architecture.* A strong hold in which persons are confined for the commission of crime, or for the incurring of debt, and which is constructed with a uniform reference to security, solidity, and convenience.

By different passages in Greek and Roman writers, it appears that among both those people the prisons were composed of cells or chambers, all more or less frightful. Sometimes, according to the nature of their offence, the prisoners were only guarded in a simple vestibule, where they might see their parents, their friends, &c. as appears from the history of Socrates. In other instances, they were immured in subterranean dungeons, often damp and infectious, in one of which description Sallust reports Jugurtha to have been plunged. The greater part of their executions were perpetrated withinside the prisons, more particularly those by strangling or swallowing hemlock.

Eutropius attributes the establishment of a prison at Rome to Tarquin the Superb, other authors to Ancus Martius; Tullus Hostilius adding, according to them, a peculiar kind of dungeon, for a long time called after him, *Tullianum*. Juvenal states that, during the time of the kings and of the republic, Rome contained but one prison, and that Tiberius caused another to be built, which was denominated the *Mamertin*.

The prisons, especially the county gaols, lately erected in our own country, are built on the best principles, in the best and most substantial manner; are replete with general convenience and such accommodations as are consistent with the safe custody of the unfortunate inmates, and often occupy sites of a most healthy and even picturesque description.

In the *Recueil et Parallèle d'Edifices en tout Genre* of Messrs. DURAND and LEGRAND, we find at the 28th plate plans and elevations of different modern prisons: in which number is distinguished, above all, our metropolitan gaol of Newgate, by Dance, which, says M. Millin, is in a style of architecture approaching to the severe manner of Florence. There is also a plan of the *Maison de Correction* of Gand, which comprises, in an octagonal shape, a great number of detached buildings all nevertheless approaching a common centre, which distribution is very advantageous in facilitating the inspection and surveillance of the establishment. We find likewise a representation of the prison of Aix, built by M. Ledoux, in a style which savours somewhat of that of the Egyptians,

but simple in its details. The same plate offers, besides, the Houses of Correction of Rome, of Milan, and of Amsterdam.

PROAULION. [Gr. from προ, before, and αυλος, a pipe.] *In ancient architecture.* This word was synonymous among the Greeks to *vestibulum* among the Romans, designating that part or passage which conducted from the exterior to the interior of a building. See VESTIBULE.

PROCESSION. [Lat. *processio*, from *procedo*, to go forward.] Processions were common among all the nations of antiquity; and among the Romans were rendered very stately and splendid in the shape of triumphal marches, obsequies of the illustrious dead, &c. They are to be found represented in an immense variety of forms upon all descriptions of antique monuments. One of the most celebrated processions of antiquity was that of the PANATHENÆA. See that word.

PRODOMUS. [Gr. προ, before, and δομος, a house.] *In ancient architecture.* Term sometimes applied to the anterior or front façade of temples, and to the portico at the entrance of the cella. See CELLA. The word PRONAOS (which see) was however often used synonymously.

PROFESSOR. [Lat. from *profiteor*, to profess, or promise openly.] *In all the arts.* A person who teaches or reads from the chair in some public institution, such as the Royal Academy, &c. a series of lectures on either of the arts.

PROFILE. [Fr. *profil.*] *In painting, architecture, and sculpture.* A portrait, or bust, is said to be in *profile* when they are presented in a side view; as, when in a portrait, there is but one side of the face shown, and nothing of the other. On almost all medals, this is the manner in which the head is represented.

This style of art was practised in the remotest antiquity, and may be said to belong, in fact, to the very first essays of painting. The tradition has been already alluded to (see PAINTING) of the Grecian girl who traced on the wall, by the shade of the lamp, the features of her departing lover. Others pretend that Apelles was the discoverer of this method; if we may believe Pliny, he invented it in order to conceal the deformity of Prince Antigonus, who had but one eye. But still more ancient monuments present us with specimens of profile, more especially medals and engraved stones. Observations on the most beautiful of these will tend to convince us that the oval form of countenance is that best adapted for the display of the beauty of the "human face divine," whether in profile or otherwise. The oval line may indeed be said abstractedly to be the most graceful that the eye can rest upon.

In architecture, profile designates the draught of any building, wherein is expressed the different widths, heights, and thicknesses, such as they would appear were the building cut down perpendicularly from the roof to the foundation. Hence the profile is likewise called the *section*, sometimes the *orthographical section*, and by Vitruvius the *sciagraphy.* In this sense, *profile* is a species of *elevation*, as opposed to a *plan* or *ichonography.*

The *profile* means likewise the outline of a member of architecture, such, for example, as a cornice, or base, &c. Hence the term profiling is occasionally used for designing, or describing the given member with compass, rule, &c.

It is from the just proportion and elegance of the profile that the several orders of architecture extract their principal beauty—and harmony, which *is* beauty. In the same way, from the profile of the columns and all the ornamental members, the connoisseur can best judge of their height, their projection, their reciprocal proportions, &c. The ancients applied the greatest attention to the profiles of their mouldings, the good appearance of which may be said to depend on the choice of the members employed therein, and in these points the Grecian architects were particularly careful and happy.

The beauty of the profile of a building mainly rests upon the projection of each member. When this is too great, the profile has a clumsy appearance; when too small, it looks meagre and petty. The ancients knew how to show both these extremes; and according to Vitruvius their method consisted of awarding to each member as much projection as height, in support of which statement most of the finest edifices of antiquity may be cited. Sometimes, however, they increased this proportion with regard to the principal member, which was calculated to stand out boldly, and cover as it were the inferior ones about it.

PROJECTION. [Lat. *projicio*, to throw forward.] *In painting and drawing.* The representation of any object whatever in perspective, that is to say, such as it would appear if viewed from a certain point.

PROJECTURE. [id quod *projection.*] *In architecture.* The prominence, outjetting, or embossing, which the mouldings and

other members have beyond the naked wall, column, &c.

PRONAOS. [Gr. προ, before, and ναος, a temple.] *In ancient architecture.* The front porch of a Grecian temple. See PRODOMUS.

PROOF. [from the verb *to prove*, from *probo*, Lat. and *prouver*, Fr.] *In engraving.* Proofs of prints were formerly a few impressions taken off in the course of the engraver's process. He *proved* a plate in different stages, that he might ascertain how far his labours had been successful, and when they were complete. The excellence of such early impressions, worked with care and under the artist's eye, occasioning them to be greedily sought after, and liberally paid for, it has been customary, among our modern printsellers, to take off a number of them, perhaps amounting to hundreds, from every plate of considerable value—and yet their want of rarity has by no means abated their price. On retouching a plate, it has been also usual, among the same conscientious fraternity, to cover the inscription, which was immediately added after the first proofs were obtained, with slips of paper, that a number of secondary proofs might also be created.

PROPLASMA. [Gr. προ, before, and πλασμα, a work, from πλασσω, to form.] *In archaiology.* See Lay FIGURE.

PROPNIGEUM. [Lat. from Gr. πνιγω, to suffocate.] *In archaiology.* This was the name given to that chamber in the Roman baths in which heat was produced, which was distributed afterwards to the different portions of the bath, such as the *Luconicum*, &c. under which the propnigeum was placed. They more frequently denominated it *præfurnium.*

PROPORTION. [Lat. *proportio.*] *In all the arts.* By proportion we mean, generally speaking, the size and dimensions of one part compared with another, or with the whole of that to which it appertains. Greatness is only, of course, a comparative term. Nothing can be either great or small, except in reference to some other thing. That thing is justly said to be in good *proportion*, when none of its details are too small or too large viewed relatively to each other.

The judgment by means of which we decide on this subject is the result sometimes of the nature of the thing, sometimes of the strength of habit, which frequently induces us to fancy disproportion in an object where it does not actually exist, and *vice versa.* In the matters pronounced on by this species of judgment, men are apt to differ very materially according to their several modes of thought. But it is otherwise with respect to that which regards proportion as springing out of the nature of the object—as, for instance, when a part possesses dimensions unsuited to its meaning and destination. A column, at the same time unusually high and very slender, would be amenable to censure in this way; in other words, the sense of unfitness or *disproportion* would be experienced by any person who should view it, and the superincumbent weight would seem in some danger of overwhelming the frail-looking support. Two similar members of the same human body, such as the hands, arms, legs, &c. should, from this very nature, be of the same size.

With respect to visible objects, proportion may be defined, in the first place, as referring to size; in the next place to degree (as in light and *chiaro-scuro*); again, to the excitement of feeling, as in those works of art which include *expression.* In fact, respecting every thing submitted to the sense of sight, proportion is requisite in durability, in force, in height of colouring, in peculiar charm and impression desired to be produced. That, therefore, is an error which limits the extent of proportion to the arts of design and architecture. Every artist should direct his attention thereto, as it is thence the principle of harmony and unity of effect arises.

A word or two may be said with regard to the particular parts which it would be most proper to subject to the principles of proportion. These should not be too far removed from each other to be readily and at once comprehended by the eye. Thus the size of the mouth or nose may be compared with that of the face generally, but not with the whole body. When a given object forms one portion of a principal part, we may compare it with that part itself, and with the other details thereof—thus, again, the fingers may be viewed relatively to the hand, the hand to the arm, and that to the whole body, or to its other principal parts. A man may lose a finger, and remain, nevertheless, a fine-looking person—but the hand which had suffered the amputation of one of its members, could no longer be termed a well-shaped hand.

In the estimate of proportion, it is necessary to consider the *nature* of the object. A window would, doubtless, be thought disproportioned whose height was six or eight times greater than its breadth, which, however, would be perfectly allowable—indeed, indispensable in a column. Here the different purposes of the two things must be taken into account. In

the window, the height and breadth have the same end to answer—namely, the augmentation of the mass of light admitted through it into the interior of the structure; whilst in the column there are two ends to be achieved, the elevation of the object to be supported, and the necessary solidity of the supporting or propping body. It suffices if the thickness of the column is just capable of bearing firmly the body pressing upon it.

The human body has always been considered as presenting the most beautiful specimens of proportion. We may remark therein all the rules of the most perfect harmony preserved. This form, considered in its totality, presents several principal parts, neither of which predominates so far as to overpower the effect of the other, and of which the smaller members gain in beauty and variety what they want in size. Thus the head, which is the smallest of the principal members, is, at the same time, the most important, and the same remark will hold good with respect to its parts. The forehead, the cheeks, the eyes, the nose, the mouth, the chin, all are influenced by the same rule—the eyes more particularly excelling in expression and beauty, while their dimensions are smaller than either of the other features.

Proportion is, in its elements, that which is agreeable to the sense: it would therefore be idle, and, indeed, absurd, to endeavour to lay down any specific rules for it. Every object must draw its most beautiful proportions from the use which is to be made of it, or from the nature of those objects surrounding it. A serpent is beautiful with proportions altogether different from those of a quadruped or bird. Nature designs it to glide along the ground in a sinuous track, and gives it corresponding length and slenderness; but an animal which has legs to assist its locomotion becomes ugly, and even disgusting, when it approaches to the proportions of the serpent; and hence the odious phantasma of dragons and "chimæras dire," and the real, actual deformity of crocodiles, lizards, &c. An artist, in this spirit, employed in the workmanship of a vase, would take care to inform himself of the purpose to which it was likely to be applied, in order to determine both its general shape and the peculiar character of its details.

In order to make an actual model of the proportions of the human body, artists who have occupied themselves in researches of this kind, have chosen certain parts of that body for measures, the head and face more particularly. In painting and sculpture, therefore, all the dimensions of the human figure have been regulated by lengths of one of these members, the former being a line drawn perpendicularly from the crown of the head to under the chin, and the latter a line taken from the top of the forehead only to the same point.

For further particulars respecting the theories of proportion (for the *practice* of it we must refer him to the works of Grecian art), the reader may consult the following works:—*La Divina Proporzione*, by Borgo S. Sepulcro, Ven. 1508, fol. *Instruction sur la Mesure avec le Compas et la Règle, en Lignes, Surfaces, et Corps solides*, by Albert Durer (originally written in German), Nurem. 1525 and 1538, fol. with plates. There were various early editions of this work, and its celebrated author published likewise at Nuremberg, in 1528, folio, four books *On the Proportions of the Human Body* (in German). This work has been translated into almost all the modern European languages, as well as the Latin. *Instruction utile sur l'Art des Mesures, à l'Usage des Peintres, Sculpteurs*, &c. (originally in German), by J. Rodler, Siemern. 1531, fol. *Instructions on Perspective, and on the Proportions of Man and of the Horse* (German), by H. Lautensack, Franc. 1564, fol. *Il primo Libro delle perfette Proporzioni di tutte le Cose che imitar e ritrar si possono, coll' Arte del Disegno*, by V. Dati, Florence, 1567, 4to. G. P. Lomazzo treats also of proportions in the first book of his *Trattato dell' Arte della Pittura*, Milan, 1584, 4to. In the same author's *Idea del Tempio della Pittura* (Milan, 1591, 4to.), there is an entire chapter treating of *Proporzione del Corpo umano de diece faccie. Li Primi Elementi nella Simmetria, o sia Commensurazione del Disegno delli Corpi Umani*, by Filippo Eugenio, Padua, 1600, fol. *Anthropometria*, by J. L. Elsholt, Patav. 1654, 4to. *Natuurlyk en Schilderkonstig, Ontwerp de Menschenkonde*, by G. Goere, Amst. 1682, 8vo. with engravings. *Sur les Proportions de 4 des plus belles Figures de l'Antique*, by A. Bosse. *Proportions du Corps Humain, mesurées sur les plus belles Figures de l'Antiquité*, by G. Audran, Paris, 1683, fol. 30 sheets. *Compasso di Proporzioni*, by P. Casati, Bologna, 1685. *Anthropometria; ou, Figure du Corps Humain*, by J. G. Bergmüller, Augsburgh, 1723, fol. 12 sheets. *Proportions du Corps Humain d'après des Regles géometriques et arithmétiques*, by G. Lichtensteger, Nuremberg, 1746, fol. In *L'Art de Peindre* of G. B. Wattelet, Paris, 1760, we find reflections

on the same subject. *Proportions du Corps Humain,* engraved by J. Punt, explained by De Witt, Amst. 1747, fol. *Dimensions du Corps Humain,* by C. T. E. Reinhard, 1767, 8vo. *Réflexions sur la Peinture,* by C. L. De Hagedorn (35th and 36th). *Traité sur les Proportions du Corps Humain,* by J. B. Hagenauer, Vienna, 1791, with engravings.

With regard to *proportion,* as respects *architecture* specifically, the following may be referred to:—*Observations sur l'Architecture,* par l'Abbé Langier, and the second book of *Civil Architecture,* by Milizia.

Propyleia. [Gr. προπυλαιον.] *In archaiology.* Name applied by the Greeks to the *vestibule* of a house. It was employed, particularly, in speaking of the superb vestibules or porticoes conducting to the acropolis or citadel of Athens, which formed one of the principal ornaments of that town. This magnificent work, of the Doric order, was constructed under the government of Pericles, after the designs of Mnesicles, one of the most celebrated architects of his age. Pausanias says, it was covered with white marble, which, for the size of the blocks, and the beauty of the workmanship, was surpassing. Stuart, in his *Antiquities of Athens,* and Le Roy, in his *Ruins of Greece,* together with the travels of the young Anacharsis, all make mention of the relics of the *propylea.*

Proscenium. [Gr. προ, before, and σκηνη, a scene.] *In architecture.* The front part of the stage of a theatre, immediately beyond the orchestra, and under the sounding board.

Proserpine. See Pluto.

Prostas. [Gr.] See Antechamber.

Prostyle. [Gr. προ, and τυλος, a column.] *In ancient architecture.* Having pillars or columns in front only: according to Vitruvius, the second order of temples. See Architecture.

Proteus. *In mythological painting and sculpture.* Proteus, as well as Triton, was by Neptune advanced to a high charge. His distinguishing character was the power of changing his form; a character more manageable by the poets (who could describe him in all his various shapes, with the transition from one to another), than by the artists, who could exhibit him only in his own form, or in some one alone of all his transmutations. Of all the poets, Virgil has described him most fully. He gives the character of his person and the description of his cave, with his seaherds about him. He represents him as tending them on shore; as plunging himself into the sea; and as riding over the surface of it. He marks out, briefly indeed, but in a picturesque manner, the whole series of the transmutations of this changeable deity.

Two passages seem to have been copied by Virgil from some ancient painting. One relates to the manner of Cyrene's placing Aristeus and herself to surprise Proteus (Geo. iv. v. 424): the other is the strange turn of his eyes whilst he is between anger and compliance; which seems not only to agree with the contest in his mind, but to suit his character as a prophet (Geo. iv. v. 452).

Protoma. [Gr. προτομη, from προ, and τεμνω, to cut.] *In archaiology.* One of the Greek terms for a bust (which word see).

Prototype. [Gr. πρωτος, first, and τυπος, a mark.] *In all the arts.* The original of any work of art; the model, the study of which gives rise to other performances.

Providence. [*providentia,* Lat. from προ, before, Gr. and *video,* to see.] *In emblematical painting and sculpture.* The Romans generally represented Providence, upon their medals, under the figure of a woman resting upon a column, holding in her left hand a cornucopia reversed, and in the right a baton, with which she points to a globe, to indicate that her cares extend over the whose universe.

Prudence. [Lat. *prudentia.*] *In emblematical painting and sculpture.* Prudence (or Good Sense) was very early received as a goddess, and had temples dedicated to her, particularly on the Capitoline hill. On a medal of Gordianus, she is represented with a rule or measure in her hand, and a globe at her feet, to show not only that the emperor, by his prudence, kept the world in order, but that the affairs of human life are by her regulated as they ought to be.

Raffaelle has represented the same quality by means of a woman with a feminine countenance, but on the back part of her head the face of an old man. She is partly veiled, has a mirror in her hand, and her arm is encircled by a snake. That reptile is indeed itself symbolical of Prudence, and often, without any accessories, represents her. But this complicated allegory is surely unworthy of the great painter who has used it, and the quality of Prudence would be better characterized under the traits of Minerva, for how is it separable from that of Wisdom?

Prytaneium. [Gr. πρυτανεϊον.] *In archaiology.* A place at Athens wherein those who had deserved well of their

country were maintained at public charge, and wherein were preserved the laws of Solon, and the statues of many divinities and celebrated generals. Pausanias makes particular mention of those of Irene, Vesta, Autolycus, Miltiades, Themistocles. It answered to the Curiæ of the Romans. See CURIÆ.

PRYTANIS. [Gr.] *In archaiology.* The president or chief of the council; a magistrate in Greece, such as were the fifty at Athens, who were lodged in the Prytaneum. See the above word.

PSEUDISODOMON. [Gr. ψευδής, false, ἴσος, equal, and δομή, a building.] *In ancient architecture.* The mode of the construction of buildings among the Greeks opposed to the ISODOMON (which word see), the height, or thickness, and length of the courses differing.

PSEUDODIPTERAL. [Gr. ψευδής, false, δίς, twice, and πτερὸν, a wing.] *In ancient architecture.* False or imperfect dipteral, the inner range of columns being omitted; according to Vitruvius, the fifth order of temples, but the sixth, in our review of ARCHITECTURE, where the reader will find it more fully explained.

The *Pseudoperipteral* was, in like manner, an imperfect peripteral, in which the columns at the wings were set within the walls, and, instead of being surrounded by a portico, it had nothing but the façade in front. The walls of the cella were advanced on each side as far as the intercolumniations of the portico, which were thereby shut. This form was sometimes adopted to give increased size to the interior of the cella. The temple of Fortuna Virilis, at Rome, and the Maison Carrée, at Nismes, are examples.

PSEUDOTHYRON. [Gr. ψευδής, and θύρα, a door or gate.] *In ancient architecture.* A false door at the back of a building.

PSYCHE. [ψυχη, the soul.] *In emblematical painting and sculpture.* The same Greek word, ψυχη, signifies a butterfly and the soul. Hence the former was used by the Greek artists as an emblem of the latter; and Cupid fondling or burning a butterfly is the same as his caressing or stinging Psyche or the human spirit. Indeed, for almost all the ways in which Cupid is seen playing with butterflies, some parallel may be found in the representations of Cupid and Psyche. Thus, in an antique, the god of love is drawn in a triumphal car by two Psyches—in another by two butterflies. By this might be shadowed forth his power over the beings of the air, of which the car is an emblem.

PTEROMA. [Gr. from πτερὸν, a wing.] *In archaiology.* The Greek name for a wall.

PULPIT. [Lat. *pulpitum.*] *In architecture.* A place raised on high, and adapted to the purposes of public speeches. The highest desk in a church, whence the sermon is pronounced. Some of these, particularly in Roman Catholic churches, where external splendour is greatly regarded, are enriched in a variety of ways; namely, by being elevated on columns or adorned with elegant carved work. They are often surmounted with a cross or mitre, and there are many specimens existing which are constructed in fine marble. The principal substance employed for the purpose in this country is mahogany.

PURITY. [Fr. *pureté*, Lat. *purus*, from Gr. πῦρ, fine.] *In emblematical painting and sculpture.* The modern iconologists have symbolized this virtue by a young girl clothed in white, holding in her hand a white lily, or sometimes a cygnet in her arms, both the one and the other being considered as emblems of candour and purity.

PURPLE. [Lat. *purpura*, Gr. πορφύρα.] *In painting*, &c. The ancients seem to have all possessed the art of tinging wool with purple. It appears that they distinguished two varieties—the marine, or animal, and the vegetable. The former was extracted from two little shell-fish entitled *murex* and *purpura*, which were fished for on all the coasts of Phœnicia, of Africa, Greece, and around all the Mediterranean isles. This purple, of a reddish violet colour, was the dearest and most esteemed. The other was red or scarlet, precious, but not equally so with the former. It was not produced from the cochineal, which seems to have been unknown to the ancients, but from the kermes of the evergreen, or holm oak. The marine purple was always used about the vestments of the Persian kings. The Tyrian purple was very celebrated in antiquity: it was of a deeper dye than the other sorts, and much valued by the Roman emperors, who forbade the use of it, and indeed, of the colour generally, and from this restriction, arose the phrase referring to those sovereigns, of *assuming the purple.*

PURPURISSUM. [Lat. id quod *purple.*] *In archaiology.* A species of colour obtained from the froth or scum of the purple. A sort of vermilion.

PUTEAL. [Lat.] *In architecture.* The *Puteal Libinis*, so celebrated in Roman history, was the cover, or rather marginal stones, of a well, which Scribonius Libo caused to be erected, by order of the se-

nate, on the space where a thunderbolt had fallen. An altar and a chapel were comprehended within the enclosure of this well; and, indeed, it became a kind of tribunal which took cognizance of commercial affairs. We still find the figure of the puteal on several ancient medals, &c. with this inscription:—PUTEAL LIBON. See BASSO RILIEVO.

PUTEOLI. [Lat. places of sulphurous waters.] *In the history of the arts.* A town of Campania, thus called, perhaps, from its hot and cold springs, the stench arising from some of which proceeds from sulphurous exhalations.

The Romans knew the utility of this port, and sought to improve its natural advantages. No part of their works however remains, except a line of piers, constructed to break the force of a rolling sea: these piers are vulgarly styled the bridge of Caligula, that conqueror having been said to have marched in triumph from Puteoli to Baia on a bridge—but this was a bridge of boats.

The ruins of the ancient edifices of Puteoli (now called Puzzuoli), are extensively spread along the adjacent hills and shores. An amphitheatre still exists entire in most of its parts, and the temple of Serapis offers many curious subjects of observation: half of its buildings are still buried beneath the earth thrown upon it by volcanic commotions, or accumulated by the crumblings of the hill; the enclosure is square, environed with buildings for priests and baths for votaries: in the centre remains a circular platform, with four flights of steps up to it, vases for fire, a centrical altar, rings for victims, and other appendages for sacrifice, entire and not displaced; but the columns that supported its roof have been removed to the new palace of Caserta. Behind this round place of worship stand three pillars without capitals, part of the pronaos of a large temple; they are of Cypolline marble, and at the middle of their height are full of holes, eaten in them by the filefish.

The present city occupies a small peninsula, and the cathedral was a pagan temple, dedicated to the divinities which presided over commerce and navigation.

In the neighbourhood of Puteoli are many relics of ancient grandeur, none of which deserves more attention than the Campanian way, paved with lava and lime on each side, with venerable towers, the repositories of the dead, which are richly adorned with stucco inside. This road was constructed in a most solid and expensive manner, by order of Domitian, and is frequently the subject of encomium in the poems of Statius.

PUZZOLANA. [Ital.] *In ancient construction.* A reddish volcanic earth, sometimes inclining to black, used in Italy instead of sand, and which, mixed with lime, produces a kind of mortar which hardens in water. It was called by the Romans *terra puteolana*, from being principally found near that town.

PYCNOSTYLE. [Gr. πυκνὸς, recurring, and στῦλος, a column.] *In ancient architecture.* According to Vitruvius, the first method of intercolumniation, having one diameter and a half between each column. See INTERCOLUMNIATION.

PYRAMID. [Gr. πυραμίς, from πῦρ, fire: i. e. shaped like a flame.] *In architecture.* A structure which, from a square, triangular, or other base, rises gradually to a point.

The object of this kind of monument was, undoubtedly, either to perpetuate the recollection of some memorable event, or to stand a testimony of the glory and splendour of deceased monarchs. That it was principally sepulchral has been rendered tolerably evident. Among other reasons because it was held, from its shape, symbolical of immortality.

The pyramids of Egypt must unquestionably be ranked among the most extraordinary specimens of human physical power, and the contemplation of them is interesting, and, indeed, awe-inspiring, from the remoteness of their antiquity. The largest are those of Geeza, so denominated from a village of that name on the banks of the Nile, distant from them about eleven miles. The three which most attract the notice of travellers, stand near one another on the west side of the river, almost opposite to Grand Cairo, and not far from the spot whereon stood the ancient Memphis.

The following description of "the Great Pyramid" is from the work of M. Savary, who journeyed to it in the nighttime, for the purpose of reaching the summit by sunrise. Coming within sight of the two largest while the moon's rays were flung upon them, he likens their appearance (at the distance of three leagues), to two points of rock crowned by the clouds. Their aspects varied according to the circuits which he made in the plain.

"At half-past three in the morning we arrived at the foot of the greatest. We left our clothes at the gate of the passage which leads to the inside, and descended, carrying each of us a flambeau in his hand. Towards the bottom it is necessary to

creep serpentlike to get into the interior passage, which corresponds with the former. We mounted it with our knees, supporting ourselves with our hands against our sides. Without this precaution, one runs the risk of slipping on the inclined plane, where the slight notches are insufficient to stop the foot, and one might fall to the bottom. Towards the middle we fired a pistol, the frightful noise of which, repeated in the cavities of this immense edifice, continued a long time, and awakened thousands of bats, which, flying round us, struck against our hands and faces, and extinguished several of our wax candles. They are much larger than the European bats. Arrived above, we entered a great hall, the gate of which is very low. It is an oblong square, wholly composed of granite. Seven enormous stones extend from one wall to the other, and form the roof. A sarcophagus, made of a single block of marble, lies at one end of it. It is empty, and the lid of it has been wrenched off. Some pieces of earthen vases lie around it. Under this beautiful hall is a chamber not so large, where you find the entrance to a conduit filled with rubbish. After examining these caves, where daylight never penetrated, we descended the same way, taking care not to fall into a well, which is on the left, and goes to the very foundations of the pyramid. Pliny makes mention of this well, and says it is twenty-six cubits deep. The internal air of this edifice, never being renewed, is so hot and mephitic, that one is almost suffocated. When we came out of it, we were dropping with sweat, and pale as death. After refreshing ourselves with the external air, we lost no time in ascending the pyramid. It is composed of more than two hundred layers of stone. They overlap each other in proportion to their elevation, which is from two to four feet. It is necessary to climb up all these enormous steps to reach the top. We undertook it at the north-east angle, which is the least damaged. It took us, however, half an hour, with great pains and many efforts, to effect it.

"The sun was rising, and we enjoyed pure air, with a most delicious coolness. After admiring the prospect around, we descended cautiously, for we had the abyss before us. A piece of stone detaching itself under our feet or hands might have precipitated us to the bottom.

"Arrived at the foot of the pyramid, we made the tour of it, contemplating it with a sort of horror. When viewed close, it seems to be made of masses of rock, but at one hundred paces distance the largeness of the stones is lost in the immensity of the whole, and they appear very small.

"To determine its dimensions is still a problem. From the time of Herodotus to our days, it has been measured by a great number of travellers and learned men, and their different calculations, far from clearing up all doubts, have only increased the uncertainty. The following table will show, at least, how difficult it is to come at the truth.

GREAT PYRAMID.

ANCIENTS.	HEIGHT. French feet.	WIDTH OF ONE OF ITS SIDES. French feet.
Herodotus	800	800
Strabo	625	600
Diodorus Siculus	600 and a fraction	700
Pliny	—	708
MODERNS.		
Le Bruyn	616	704
Prosper Alpinus	625	750
Thevenot	520	682
Niebuhr	440	710
Greaves	444	648

NUMBER OF LAYERS OF STONE WHICH FORM IT.

Greaves	207
Maillet	208
Albert Liewenstein	260
Pococke	212
Belon	250
Thevenot	208

According to Herodotus, the blocks of stone which served for the construction of the pyramids were drawn from quarries of oriental mountains on the frontiers of Arabia. This, however, is absolutely contrary to the observations of modern travellers, who have ascertained that the same chalky stone of which they are composed is the produce of the country on which they stand. Other ancient writers have followed Herodotus in giving similar unfounded accounts; and the moderns have even outvied them in estimating the difficulties of the erection of these monstrous piles, conceiving it most strange how the primeval people by whom they were executed, and who appear to have had such a limited knowledge of machinery, could have succeeded in their fabrication.

The method employed to this end was probably very simple. Indeed, physical power seems to be all that was requisite; since other Egyptian works of similar antiquity—such as spacious temples, obelisks, and immense columns, covered with huge masses of stone, demanded a far greater knowledge of the niceties of construction, and a much deeper feeling for the fine arts in general.

The ancient Egyptians seem to have penetrated very far into the mysteries of nature; and although their superstition appears at first sight to be extremely gross and absurd, yet it is very probable that their deities were only emblematical personages, representing by sensible images the grand effects or presiding principles which they supposed to exist in the universe. Thus the moon was called Isis, and the sun Osiris; and to the honour of this last deity, from whose visible influence and creative energy all things seem to spring into existence, it is not improbable that the Egyptians erected those stupendous monuments, and dedicated them to him as temples or altars. It was natural to build them in that shape which the rays of the sun display when discovered to the eye, and which they observed to be the same in terrestrial flame, because the circumstance was combined in their imaginations with the attribute which they adored. If they were temples dedicated to the sun, it seems a natural consequence that they should likewise be places of sepulture for kings and illustrious men, as the space which they covered would be considered consecrated ground. This hypothesis is common, and is not contradicted by the present reasoning. But, considering them as altars, and as most travellers agree that they were never finished, but terminate in a square horizontal surface, it would not be refining too much, to venture an assertion that, in great and solemn acts of adoration, the Egyptians constructed fires, the flames of which should terminate in the vertex of the pyramid, and so complete that emanation of their deity which they admired and adored.

The ancient authors, such as Herodotus, Strabo, Diodorus Siculus, &c. who have treated of Egypt in general, have also gone into detail with respect to the pyramids, and the same observation will hold with regard to several modern travellers—Pococke, Norden, Savary, Volney, &c. But many works have been written exclusively on this particular subject, and among them are the following:—Petri Bellonii, *De Admirabili Operum Antiquorum et Rerum suspiciendarum præstantia, libri tres*, Paris, 1535, 4to. This edition is very rare, and the work was reprinted by Gronovius, in the eighth volume of his *Thesaurus Antiquitatum Græcarum*. John Greaves, *Pyramidographia; or, a Description of the Pyramids in Egypt*, London, 1646, 8vo., and in the first volume of his *Miscellaneous Works*, published by T. Birch, London, 1737, 2 vols. 8vo. In the tenth volume of a *Collection of Voyages and Travels*, Lond. 1744, 4to. are also some remarks on this subject, which Thevenot has translated into French in the first volume of the *Relation de divers Voyages curieux*. F. L. Norden has inserted, in the first volume of his *Voyage d'Egypte, Remarques sur la Pyramidographia de* M. John Greaves, *ci-devant Professeur à Oxford. L'Egypte de Murtadi, Fils de Graphiphe, où il est traité des Pyramides, du Débordement du Nil, et des autres Merveilles de cette Province, selon les Opinions Arabes*, translated from the Arabic by P. Vattier, Paris, 1666, 12mo. An English translation appeared at London, 1666, 8vo. Olai Celsii, *Historiola Pyramidum Ægypti*, Upsal, 1725, 8vo. J. D. Gochwend, *Programma de Pyramidibus Ægypticis*, Eisenberg, 1743, fol. G. P. Krans, *Theoria Pyramidum*, Frank. and Leip. 1757, 8vo. *Ægyptische Merkwürdigkeiten*, &c. i. e. *Memorable Things of Egypt, containing Extracts from Herodotus, Diodorus, Strabo, &c. as likewise modern Travellers*, Leipsic, 1786, 8vo. White, *Ægyptiaca; or, Observations on certain Antiquities of Egypt*, Oxford, 1801: the second part of which work contains an English translation of the *Essay on the Antiquities of Egypt*, composed in Arabic by Abdollatif.

Pyx. [*pyxis*, Lat. from πύξις, Gr.] *In archaiology*. Name given to the little casket in which the ancients often deposited their jewels and other ornaments. It was frequently of rich materials, and highly embellished, its shape was a long square, and it is often found represented on Greek vases. One is presented in a picture serving as vignette to the 7th plate of the second volume of the *Antichita d'Ercolano*.

Q

Quadrigarii. [Lat. *quadriga*, a chariot.] *In archaiology*. Name applied generally to the charioteers of the Circus. From a small figure in bronze, published by Ficorini, a beautiful *basso rilievo* in the collection of Giustiniani (N° 94), and the statue engraved in the third volume and 31st plate of the *Museo Pio Clementino*, we find that the quadrigarii had their feet covered, although Bianconi expresses a different opinion. The most remarkable part of their costume is a ligature bound over their tunic.

Quadrigats. [Lat.] *In numismatics*.

Name of the first species of silver money. It was struck in the year of Rome 485 (a little before the first Punic war), and bore a head of Janus, and, on the reverse, the figure of a woman leading a chariot and horses.

Quadrupeds. [Lat. *quadrupes*, from *quatuor*, four, and *pes*, a foot.] *In painting*, &c. It will be obvious that the student should make himself acquainted with the several varieties and shapes of these animals, many of which are introduced frequently into paintings of almost every description. Let him consult the naturalists; and under the heads particularly of *lion*, *elephant*, *panther*, *horse*, *ape*, &c. he will find those treated of which it is most desirable he should be familiar with, and which have been most frequently represented in allegorical and other subjects by the artists of antiquity.

Quartering. *In heraldic painting*, is the dividing a coat into four or more quarters or quarterings, by parting, couping, &c. that is, by perpendicular and horizontal lines, &c.

Quarter round. See Ovolo.

Quartz. [German.] A genus of siliceous earths, very common in Europe, more or less transparent, one of the most abundant natural productions of the kind, and the varieties of which are frequently employed in the arts. M. Magellan observes, that quartz is one of the principal kinds of stone containing metals.

Quay. [*quai*, Fr.] *In architecture.* An artificial bank, constructed of masonry, to the sea or a river, on which goods are conveniently unladen.

Quoins. [*coin*, Fr.] *In architecture.* Stones or other materials put in the angles of buildings to strengthen them.

R

Rafter. [Dutch.] *In architecture.* The secondary timbers of the house; those which are let into the great beam.

Rebate. [Fr. *rabot.*] *In the arts of construction.* A kind of hard freestone, used in the formation of pavements. Also a piece of wood hafted into the top of a long stick, serving to beat out the mortar. Rebate is likewise the name given to an iron tool sharpened something like a chisel, and employed by different workmen in dressing and polishing wood, &c.

Recess. [Lat. *recessus*, from *recedo*, to retire or withdraw.] *In architecture.* A depth of some inches, constructed in the thickness of a wall, such as arcades, niches, &c.

Red. [Saxon, ruhd, Welsh.] *In painting.* One of the three primitive colours, very lively, and possessing considerable brightness. There are an infinite number of tints, serving to the uses of painting—such as lake, carmine, vermilion, red brown, orpiment, violet, &c. which multiply their own varieties by mixture with other colours darker or brighter.

Redans. [Fr.) *In architecture.* Those projections constructed at intervals in a wall built on uneven ground, to preserve the same height throughout its length. They are sometimes used in foundations from the same causes.

Redimiculum. [Lat. from *redimio*, to crown or encompass.] *In ancient costume.* This name is applied to a cincture which was used by the Roman ladies, and which, after having been twice passed round the neck, was crossed over the breast, and passed twice or thrice round the sides, in order to fix the robe firmly thereto. Buonarroti says, that the early Christian painters were accustomed to give this cincture to their representations of angels. A specimen is seen upon the figure of a naked genius, published by this author in the 28th plate of his *Osservazioni sopra Framm. di Vetro.* It was, without doubt, considered in an allegorical view by the primitive Christians, on account of its offering the resemblance to the cross.

The term *redimicula mitræ* is given to those pendent strings which serve to tie under the chin the mitre or Phrygian bonnet.

Reduce. [*reduco*, Lat.] *In the arts of design.* This term signifies to copy a picture, a drawing, or print, diminishing its size, and at the same time carefully preserving its proportions. This is done either by the artist adopting himself a smaller scale, or by the employment of mechanical instruments, such as the pantograph (which word see), &c.

Reenter. [*re*, again, Lat. and *entrer*, Fr.] *In engraving.* This phrase is sometimes used to denote the passing of the graver into the incisions of the plate, where the aquafortis has not sufficiently bitten, in order, by deepening them, to give more force to certain parts.

Refectory. [Lat. *refectorium*, from *reficio*, to refresh.] *In architecture.* The hall or room wherein meals are taken. This term is almost confined to religious houses or colleges.

Reflex. [*reflexus*, Lat.] *In painting*, means those places or objects in a picture which are supposed to be illuminated by light reflected from some other body in the same piece.

The study of reflexes is one the understanding of which is of considerable importance to the artist. He may, indeed, think that, in painting after nature, he is doing what will render the study of that theory unnecessary. We are of opinion, that such an idea would be a mistaken one in the practiser of any branch or any part of the art. If admissible in any case, it is so in that of the landscape-painter, but in history and portrait it should be recollected, that the painter most generally has the choice of the position, of the distribution of the whole, of the introduction of the light, and even of the accessories serving to relieve or set off the principal objects. In this point of view, therefore, it is obvious that a knowledge of the doctrine of reflexes in particular, as well as of *chiaro-scuro* in general, will be most desirable. In fact, no painter ought to disregard it, since it will be serviceable to him even in forming a correct judgment of those colours exhibited in nature. Cicero's observation should never be lost sight of—that the painter should have skill to perceive and to discriminate, better than any other man, the light and shades thrown out by different bodies. (Cicero's Academic Questions, book 4.)

The fundamental principle of the theory of reflexes is, that every coloured object emits its light—that is to say, its colour, on all surrounding objects, in the same way that a flame illumines every thing about it. But the effect of this reflex is only perceptible under certain circumstances, which are subjected to and regulated by the general theory of light. Any body is so much the more enlightened as,—first, the light itself is stronger; second, the distance is less between the light and it; third, as the light strikes its surface more directly; and hence it arises that the force of the principal light influences more or less that of the reflexes. The flame of a wax candle, although it have great effect at nighttime, is scarcely perceptible during daylight; and in like manner we perceive not the presence of the reflex except in places which are darker than the reflex itself.

For further observations on the doctrine of reflexes, the student is referred to Leonardo da Vinci's admirable *Treatise on Painting* (75th and following chapters): to the *Grand Livre des Peintres* of Lairesse, 5th book, and 3d and 5th chapters; to the 49th *Consideration* of Hagedorn on Painting; to the *Letter to an Amateur of Painting*, Dresden, 1755, 8vo., 350th and following pages; and to Sulzer's *Theory of the Fine Arts*, at the word *Wiederschein*.

Religion. [Lat. *religio*, according to Cicero, from *relego*, to read again, from the great attention necessary for that study.] *In emblematical painting and sculpture.* Picart has represented the Christian religion with a majestic air, a simple habit, and the monogram of Christ on her chest. An allegorical figure of Religion, sculptured by M. Rousseau, bears a simple tunic covered with a mantle, and holds the book of the evangelists and a cross.

Reliquary. [Fr. *reliquaire.*] *In sculpture and modelling.* Portable vessel of gold, silver, or other substance, often enriched with other ornaments, and serving for religious purposes, in Romish monasteries, &c.

Repetition. See Imitation.

Repose. [Fr. *repos*, from Lat. *repono*, to lie down.] *In painting, sculpture, &c.* That quality opposed to violence: the principle through which an action of a passionate kind in a picture—such as a quarrel or assassination, a feast of bacchanals, or even a powerful effect of light, is displayed with threefold vigour and effect, and prevented from becoming painful, by the feeling of contrast and juxta-position. When all is overstrained, or violent, or gorgeous, the eye has no point to rest on, and the imagination is fatigued and repelled. It is this which renders battle pieces, generally speaking, uninteresting, if not offensive. In the ordinary language of art, the word is occasionally applied to express accord or agreement in tones or colours, and a judicious distribution of light and shade.

Repose of body is indicated in figures which are seated or lying, and sometimes in standing figures. There is a well known little figure of a *piping faun*, which displays this latter species in a manner equally complete and graceful.

Representation. [Lat. *repræsento*, from *re*, again, and *præsens*, present.] *In all the arts.* The act of exhibiting, as if the thing exhibited were present.

Reservoir. [Fr. from *reserver*, to lay up.] *In construction.* A large basin in which water is collected in order to be

distributed again in different directions, and for various purposes. These are often constructed of timber, and lined interiorly with lead. Others are made of masonry, &c.

Ressenti. [Italian.] *In drawing.* A word employed in the arts connected with drawing, to signify whatever is pronounced or expressed with force. Thus we speak of muscles *ressenti*, or a manner *ressenti*. Nature exhibits all the varieties of form, but these are only occasionally to be so denominated. Women, children, and men of delicate habits or profession, display only muscles lightly shaped and unmarked by strenuousness, while, on the other hand, men exercised to robust employments present this style of person. Who is not struck with the contrast between the Farnese Hercules and the Belvedere Apollo or the Antinous? Among the moderns, Raffaelle is perhaps the greatest painter to be cited for the precision and variety of the shapes which he has adapted to different figures, as well as for superiority in the art in general.

Restore. [*restaurer*, Fr.] *In all the arts.* To repair a building, and place it again in good order. Also to put again into its primitive state a mutilated image, or any other piece of sculpture. The greater part of the antique statues, having been more or less mutilated when found, have been *restored* with a greater or less degree of sagacity and good taste. Many, however, have suffered irremediably from the incongruous mistakes of these *restoring* gentlemen. The fact is, that of all the departments of the fine arts, this, if not one of the highest, is undoubtedly, one of the most delicate and difficult. To restore well, a man should not only have eye to perceive and imagination to comprehend, but a hand ready and skilled to embody the ideas and expressions of the august originator of the work; but, unfortunately, the hand is much oftener found to possess the former than the latter quality—namely, to be ready than skilful; and hence the frequent want of harmony between different parts of the same performance, the palpable differences of style, and even of purpose, which induce the spectator most heartily to wish that the mangled trunk or the shattered column stood before him, rather than the heterogeneous mass half made up of perfection and half of pretence.

Many of the blunders into which gentlemen given to antiquarian research have fallen, date their origin from the little attention devoted by them to the detection of modern additions and *restorations*. Fabretti, in his work on the column of Trajan, has sought to prove, by a *basso rilievo* representing a chase of the emperor Gallienus, that they shoed horses at that time in the same manner as at the present day; whereas there cannot be any doubt that the ground on which this essayed proof stands, exists in consequence of the *restoration* made by an ignorant modern artist.

There is, however, no doubt, likewise, but that many fine statues were broken and repaired in ancient times. During the civil wars of Greece, above all in those of the Achaians against the Etolians, the public monuments were often defaced; and others might have been injured during their transportation to Rome, in which city itself the relics of art often suffered in times of public commotion. It was also very customary for one Roman emperor to *restore* the medals of his predecessors. See Medals.

In Italy, where the antique statues often exhumed in ruins were destined principally for the decoration of palaces, villas, or saloons, it is natural that they should wish to render perfect (that is, of all their chief members), those discovered treasures—inasmuch as to the motley crowd assembled in the hall of a palace, a mutilated figure would rather be an object of disgust than admiration. Consequently, at times, great modern artists have been employed in the work of restoration, among whom we may reckon Michel Angiolo, Della Porta, Sansavino Tatta, Fra. Giov. Agnolo, Pietro Tacca, Salvetti, &c. but most generally the work has been confided to indifferent or, at best, mediocre artists. Sometimes even it has happened that those artists most skilful in sculpture have been wanting in sufficient knowledge of ancient costume, and of the mythic circles (see Mythic Circle) of the ancients to restore with complete propriety.

Modern times have produced various methods of restoring the faded or damaged pictures of the old masters. In some cases this has, doubtless, been wrought successfully, and the result is a fortunate one for the lover of art: but we cannot too strongly express our conviction of the extreme delicacy and hazard of such undertakings. Some further observations on this subject may be found in a work entitled *Handmaid to the Arts*, London, 1758, 8vo.; in a letter of Louis Crispi, in *Lettere sulla Pittura, Scultura*, &c.; and in the *Gentleman's Magazine* for 1764, p. 534.

Reticulatum. [Lat.] *In architecture.* Ancient method of constructing a wall, preferred, by Vitruvius, to an *incertum*

(which word see), on account of having a more regular appearance. He objects, however, that it was wanting in solidity, the stones not having been horizontally placed.

RETOUCH. [Fr. *retoucher.*] *In painting, sculpture, &c.* The application of the master's hand to his pupil's performance, in order to improve it. A similar process used with regard to his own works, and for the same purpose. Also see RESTORE.

RETRACE. [Fr. *retracer.*] *In drawing,* &c. To renew the outline, &c. of a drawing which had been effaced.

RETURN. [Fr. *retour, retourner.*] *In architecture.* The continuation of a projection, moulding, &c. in a different or opposite direction.

REVERSE. [Fr. *revers.*] *In numismatics.* That side of a coin or medal on which the head is not impressed. See MEDALS.

REZ-DE-CHAUSSÉE. [Fr.] *In architecture.* The ground floor.

RHAMNUS. *In the history of the arts.* A town of Attica, built near the sea, on the south arm of the Euripus, seven miles N. E. of Marathon. On a neighbouring eminence stood the temple of Nemesis, the goddess of vengeance. Her statue was sculptured by Phidias, from a block of Parian marble, which the Persians had brought thither to assist in erecting a trophy. It was ten cubits high, and was inscribed, not with the name of the artist himself, but with that of his favourite pupil Agarocritus.

RHODIACUM. [Lat.] *In ancient architecture.* In the interior of that part of the house which, among the ancients, was occupied by the men, there was often a peristyle larger than that belonging to the female's portion. It was surrounded with porticoes, and the intermediate space planted with herbs and flowers. Sometimes these porticoes forming the peristyle were of the same height all round, but, in other instances, the central columns were higher than the others, which latter disposition was denominated by the word *rhodiacum.*

In describing that division of the Greek houses appropriated to the men, Vitruvius makes no mention either of bedchamber or of common sitting room; and hence it has been inferred, that the master of the house passed the day generally in the EXEDRA (which word see), or the library, and repaired at night to the apartment of his wife, situated among the rooms of the women.

RIDGE. [hryg, Saxon, rig, Danish.] *In architecture.* The top of the roof rising to an acute angle.

RIDING SCHOOL. See MENAGE.

RILIEVO. See BASSO RILIEVO.

ROCK WORK. *In architecture.* A construction of misshapen, rough, and irregular blocks or pieces of stone, sometimes intermixed with shells, and designed to represent the unpolished and angular appearance of the surface of rock. This kind of work is principally employed to construct grottoes, baths, &c. See GROTTO.

ROMAN. [from *Rome.*] *In the history of the arts.* Appertaining to the people or country of Rome. See ARCHITECTURE, ARTS, PAINTING, ROME, SCHOOL, SCULPTURE, &c.

ROMANESQUE. [Fr.] *In painting, &c.* That which appertains to romance or fable. The romanesque, in historical painting, may be defined as the choice of a subject of a fanciful nature rather than one founded on fact. The *romantic* differs from the *romanesque,* inasmuch as the latter is merely fabulous; whereas the former even admits of being true, provided it offer situations of an unusual and impressive nature.

ROME. [Lat. *Roma;* named from *Romulus,* its founder; or, according to others, from the Greek ῥώμη, an oak, or strength.] *In the history of the arts.* A city of Italy, at one period mistress of the whole known world. It was, as the tradition goes, founded by Romulus, a half-fabulous chief of remote antiquity, in the year 748 before Christ: is situated on seven hills, and on the side of the Tiber. The names of these hills were Palatinus, Capitolinus, Aventinus, Janiculus, Cœlius, Esquilinus, and Quirinalis.

The city of Rome, like its inhabitants, was at first rude and unadorned. The houses, agreeably to the name given them *(tecta),* were only a covering and defence against bad weather. They were not formed into regular streets, but flung together as chance directed. The walls were half mud, and the roofs pieces of boards; and even this latter was an after improvement; for, in Romulus's time, the roofs were only of straw, and from thence called *culmina.* The palace of the kings was a little thatched house, called, by Ovid and Livy, a *cottage.* Any thing finer than ordinary was appropriated to the embellishment of the temples; and when these began to be furnished with the statues of the gods (which was not till long after Numa's time), they were either of earthenware or chopped out of wood. The chief ornament, both of the temples and the houses, was their ancient trophies, which were trunks of trees loaded with the arms taken in wars; and this privilege was at first allowed only to patricians, it having some

rights annexed to it. It was unlawful to remove these trophies, and they never were removed but on extraordinary occasions, as after the battle of Cannæ, &c.

Such was the state of Rome, when her citizens had subdued the better part of Italy, and were able to engage in war with the Carthaginians, the strongest power then both by land and sea. But it was not till the second Punic war that the Romans acquired any taste for the arts and elegancies of life: for though in the first war with Carthage they had made an irruption into Sicily (which, in the old Roman geography, made a part of Greece), and were masters of several cities, in the eastern parts of Italy, which were inhabited by Grecian colonies, and adorned with the pictures and statues in which that nation excelled all the world, they had hitherto looked on them with so careless an eye as not to be touched by their beauty. This insensibility remained thus long, either from the grossness of their minds, from superstition, or (which is more likely), from a political dread that their martial spirit and natural roughness might be destroyed by Grecian arts and refinements.

When Fabius Maximus, in the second Punic war, had taken Tarentum, he found it full of riches, and adorned with paintings and statues, particularly with some fine colossal pictures of the gods fighting against the rebel giants. These were made by the most eminent masters of Greece, and the Jupiter probably by Lysippus: for Lucilius speaks of a remarkable figure of Jupiter at Tarentum, sixty feet high. The money and plate Fabius ordered to be sent to Rome, but the statues and pictures to be left behind. The secretary, struck with the largeness and noble air of the statues, remonstrated against their being left with the rest; upon which replied Fabius, "Yes, leave their angry gods to the Tarentines—we will have nothing to do with them."

Marcellus had, it is true, a year or two before, acted very differently at the taking of Syracuse, which abounded in the works of the best masters: for he sent all the pictures and statues to Rome, in order (as he used to declare) to introduce a taste for the fine arts among his countrymen.

This difference of behaviour in their two greatest leaders occasioned two parties in Rome. The elder part of the community stood up for Fabius. "Let the Greeks (said they) keep their effeminate arts to themselves, and let the Romans learn only how to conquer and govern." The younger people, however, who were delighted with the statues put up in the public places of the city, extolled Marcellus, saying:—"We shall now be no longer reckoned barbarians. Our generals have conquered our enemies, but Marcellus has conquered our ignorance: let the Romans be polite as well as victorious."

Marcellus's party prevailed; and from this point of time may be dated the introduction of arts into Rome. How fast and how greatly the love of the arts prevailed there may be seen by a speech of old Cato the censor in the senate, not above seventeen years after the taking of Syracuse. In vain did Cato exclaim against it; the Roman generals, in their several conquests, seem to have strove who should bring away the most statues and pictures to adorn their triumphs and the city of Rome. The elder Scipio from Spain and Africa, Flaminius from Greece, and, more particularly, Æmilius from Macedonia, brought in a very great number of vases and statues. The latter general adorned his triumph (which lasted three days) with fine statues and sculptured vessels, taken from the collection of Alexander the Great: as for the inferior spoils of no less than seventy Grecian cities, he left them to his soldiers, as unworthy his triumph. Not many years after, Scipio the younger destroyed Carthage, and transferred to Rome the chief ornaments of that city. The same year Mummius sacked Corinth, one of the principal reservoirs of the finest works of art. He had no taste; but, however, he took the surest method not to be mistaken, for he carried off all that came in his way, and in such quantities that he alone is said to have filled Rome with pictures and statues. In the sale of the plunder of Corinth, there was a picture of Bacchus by Aristides, for which king Attalus gave a sum commensurate to about £5000. Amazed at the vast price, Mummius ignorantly thought there was some magic virtue concealed in it, and actually took away the picture again from Attalus (who grievously complained thereof), and sent it to Rome. The soldiers had used it for a table to play dice upon.

At a further period, Sylla, besides many others, made vast additions to these treasures, by his taking of Athens, and by his conquests in Asia.

These acquisitions were likewise carried on by the governors of the conquered provinces, whose rapaciousness, though not fully exposed by the partial historians, is, by an honest poet of their own, set in as strong a light as that of Verres by Cicero. (Juvenal Sat. viii. v. 87—139). If many of their prætors and proconsuls acted at

all like Verres, when governor of Sicily, probably Rome was more enriched by the secret rapines of their governors, than by the open spoils of their generals. For, according to Cicero, there was not a gem, a statue, or picture which Verres saw and liked, but what he took from the owner.

There was another, but less infamous, method of increasing these treasures:—namely, the custom of ædiles, when they exhibited their games, of adorning their theatres and other places with statues and pictures, bought or borrowed all over Greece, and even from Asia. Scaurus had no less than three thousand for mere ornament, in a theatre built only for four or five days. The same Scaurus brought to Rome all the pictures of Sicyon, one of the most eminent schools of Greece for painting, on pretence of a debt due to the Roman people.

From these public methods of drawing the works of the best ancient artists into Italy, it grew at length to be a part of private luxury, to adorn their houses, porticoes, and gardens with the statues and pictures that could be produced out of Greece and Asia. None went earlier into this taste than the Luculli, and particularly Lucius Lucullus, who is censured by Plutarch for his excessive fondness for pictures and statues, which he got from all parts at an immense expense. This man was attached to the polite arts from a child. He was famous, likewise, for his vast baths and piazzas, and for his magnificent gardens. The Julian family fell into the same excess. Julius Cæsar was a great collector, and as fond of gems as his successor, Augustus, was of Corinthian vases. Pliny speaks of a superb collection of gems which Julius placed in his temple of Venus Genetrix; and Augustus is reported to have proscribed certain individuals only to obtain their fine Corinthian vases.

This may be called the first age of the flourishing of the politer arts, or rather the age in which they were introduced at Rome; for though some, perhaps, had a good taste, in general there was yet rather a *love* than any great *knowledge* of their beauties among the Romans. No doubt the latter would have obtained much earlier amongst them than it did, had it not been for the frequent convulsions of the state, and the perpetual struggles of some great man or other (from Sylla to Augustus), to get the reins of government in his hands. The succeeding peaceful times, and encouragement given by Augustus to all the arts, afforded leisure to contemplate the fine works collected in the age before, and to perfect the taste for the elegances of life. The artists who were then much invited to Rome worked in a manner greatly superior to what they had done even in Julius Cæsar's time; as appears evident by comparing the medals of the two eras; so that under Augustus may be reckoned the second and most perfect age of sculpture and architecture, as well as of the sister art of poetry. He changed, indeed, the whole face of Rome itself: he found it ill built and left it a city of marble. He adorned it with fine buildings, and decked them, and even the common streets, with some of the finest statues in the world.

On the death of this magnificent prince, the fine arts suffered a great change, although not so great as eloquence and poetry. There is a secret union through all the politer arts, which makes them fade or flourish together. The favour of Augustus, like a gentle dew, caused them to bud forth and blossom; while the sour reign of Tiberius, like a sudden frost, checked their growth and killed all their beauties. The vanity and tyranny of the subsequent times gave the finishing stroke to what Tiberius's ungenial sway had begun. From the baleful influences of himself, of Caligula, and Nero, the arts suffered so much, that they were soon after reduced to a very low ebb. Some spirit was afterwards given to the arts by the series of wise emperors after Domitian; but after the Antonines they declined very fast, and by the time of the thirty tyrants, were so utterly fallen, as to be unable to rise again under the succeeding emperors.

Hence it appears, that the fine arts, in the first age under the republic, gradually grew up and flourished together: that in the second or Augustan age, they were at the highest perfection: that in the third, from Tiberius to Gallienus, they both declined, then revived a little, and at last sunk entirely together.

For this reason, in comparing the descriptions of the poets with the works of art (see Poets), all should be omitted after the Antonines, and those only referred to who belonged to the three great ages, with the understanding that the writers of the first were but little acquainted with the arts, consequently their authority should be received with reservation. Ennius has the most picturesque strokes of any of them, but his descriptions are probably more from reading than taste. Besides, the appearance, dress, and attributes of

the allegorical beings were not so well settled in his time as they came to be afterwards. Passages, therefore, from him and his contemporaries should be very sparingly used, and rather to illustrate than build on; for they sometimes differ materially from the Augustan writers, who, on all accounts, are the most to be depended upon, especially Virgil. His Æneid should, indeed, be the standard in such inquiries. His taste, judgment, and exactitude give him the preeminence. Ovid's authority is but of a mixed kind; the luxuriance of his fancy and his incorrectness make what he says doubtful and uncertain. The poets of the third age have a middle kind of authority, as much better acquainted with the works of art than the ancient writers, and much less exact than the Augustan. Silius, perhaps, may be allowed the greatest authority of any poet of this age for his carefulness and particular love of the arts; as Lucan's heat, and Statius's inexactness may render them less fit to be depended on than others who wrote in the decline of poetry and of the arts at Rome.

The most noble remains of ancient Rome, such as the COLOSSEUM, PANTHEON, &c. (see those words, and ARCHITECTURE), have been elsewhere treated of in this work; and it will not consist with the plan of it to go into detail respecting the various works of art which decorate the modern city. The principal ornament of this is unquestionably the cathedral of St. Peter, the largest and most beautiful church in the world. It was projected by Nicholas V: Julius II. laid the first stone in the year 1506; but the whole structure was not completed until the next century. It is said to cover twenty acres, and to have cost upwards of one million sterling. The original artist was Bramante, but the greater part was from the plan of Michel Angiolo, who raised the cupola; Maderni finished it in the year 1621.

ROMULUS. *In mythological painting and sculpture.* As the Romans thought they could not do too much honour to their founder, they made Romulus the son of Mars, the god who must have been most respected in the first ages of their military state. He is sometimes represented so like his father, that it is difficult to distinguish their figures asunder. On a medal of Antoninus Pius he appears like Mars Gradivus, with a spear in one hand, and a trophy on the opposite shoulder. It is very likely that several of the supposed figures of Mars, with a trophy so placed, belong rather to Romulus, who was the inventor of trophies among the Romans.

The whole story of the birth of this hero is represented in a rilievo at the villa Mellini in Rome. It is divided into four compartments. In the first Mars is going to Rhea as she sleeps by the Tiber. In the second she is sitting with her twins in her lap, whilst Amulius seems to be upbraiding her. In the third the two infants, Romulus and Remus, are exposed on the banks of the river; and the fourth represents them as cherished by the wolf, whilst Faustulus stands surprised at their strange situation. This work is but indifferent; however, the particulars of it are to be met with in other works of better ages. The descent of Mars to Rhea is not uncommon; and the circumstance of Romulus and Remus being suckled by the wolf is very common on medals, gems, and statues.

ROOF. [Sax. or from Gr. ὀρόφ, which from ερεφω, to cover.] *In architecture.* The covering of a house, or other building, by means of which its inhabitants are protected from the injuries of the weather. It is the essential part of the enclosure of a house, and is frequently used to express the whole. Thus, *to come under a man's roof* is to enjoy his society and protection. *Tectum* was used in the same sense by the Romans.

The roofs of the ancients, according to Vitruvius, consisted of the following parts. *Trabes*, a beam or wall-plate—being the timber which is laid upon the walls, columns, &c. to receive and distribute the pressure of the roof. *Culmen*, the top or ridge, of consequence the ridgepiece. *Columen*, from whence columns derive their name: this must, therefore, be what we call the king-post. *Transtra*—if the space of the roof is great, these, therefore, may be considered as large or principal rafters. To these are added *capreoli*, struts or braces; *canterii*, small or common rafters, projecting to the extremities of the eaves; *templa*, cross or longitudinal pieces, which serve to support or strengthen the *asseres*, or laths, which support the tiles or covering.

The pitch of the roof should be regulated by the climate, and by the materials made use of to defend the timber from the weather. Roofs covered with lead may be nearly flat, but this method is seldom used. For tiles, the roof must be higher than the pediment pitch, which is one fourth of the entire building. But this pitch is scarcely high enough for slates. Copper coverings have recently

been adopted, and may be laid on roofs of a low pitch.

Rose. [Lat. *rosa.*] *In numismatics and sculpture.* Several authors have believed that the rose was the symbol of ancient Rhodes. This flower is certainly seen upon the medals of that town, as well as upon those of Rhoda in Spain.

The *rose* or *rosette* is an ornament sculptured in the centre of each face of the abacus of the Corinthian capital.

Rostral Column. See Column.

Rostrum. [Lat.] *In architecture.* The place of common pleas at Rome, wherein was a pulpit set (trimmed with sterns or forefronts of ships), out of which place they were wont to make orations to the people: a pulpit: a pleading place.

Rotunda. [Lat. *rotundus*, round, from *rota*, a wheel.] *In architecture.* A building which is round both within and without.

Round Towers, Cromlechs, &c. of Ireland. The round towers of Ireland, of which the author has a list of nearly seventy now remaining, are among the most singular and disputed buildings of antiquity. They resemble one another in general appearance, and vary from thirty to one hundred and thirty feet in height, and from thirteen to nineteen or twenty feet in diameter. Their resemblance to the pillars or round towers of the east cannot but be remarked. These structures have opened to men of leisure and erudition a spacious field for conjecture. Giraldus Cambrensis mentions them as early as 1185; John Lynch alludes to them in 1662, and says the Danes who entered Ireland, according to Giraldus, in 838, are reported to be the authors of our orbicular narrow towers. "They were called," he says, "*clock theach*, or house of the bell." Peter Walsh wrote of them in 1684, and Dr. Molyneux in 1727. Since these, Dr. Ledwich and Mr. Grose are the most satisfactory. Some writers think that they were watch towers or beacons to observe the approach of an enemy, and others that they were merely belfries to warn the country round of danger, or to call the people to worship, because they are mostly found near their ancient churches. To the author this hypothesis appears quite unsatisfactory: the tower at Kilkenny, which he has measured and investigated, is, indeed, evidently older than the cathedral, the south transept of which appears to have been shortened in its original building, on account of the round tower, which is within a very few feet of it. Other antiquarian writers suppose them to have been the residence of anchorite monks, in imitation of eastern pillars similar to that of Allahabad. Some few imagine them to have been places of penance, or purgatorial pillars, in which the penitent was elevated according to his crime, and descended as his offences were expiated.

A description of one may serve for the whole; and we will take that at Monasterboice, three miles from Drogheda. This fine tower is one hundred and ten feet high, and fifty-one feet in circumference, beautifully diminishing like the shaft of an antique Doric column. Its diameter is seventeen feet, and the thickness of the walls, which are built of a blue stone found in the neighbourhood, three feet six inches; the door is five feet six inches high, twenty-two inches wide, and six feet above the present level of the ground. The ancient church, which is close to it, is now in ruins. In the churchyard are two very old and curious crosses; one, about eighteen feet high, covered with sculpture, is called St. Boyne's cross, and is esteemed the most ancient religious relic now in Ireland. It is of one stone, and is said to have been sent from Rome, and erected by order of the pope. Among the sculptures on it, there is an inscription in Irish characters, in which is plainly legible the name of Muredach, who was for some time king of Ireland, and died in 534, about a hundred years before the arrival of St. Patrick in that kingdom.

This, however, is by no means the loftiest round tower; that of Drumiskin, in the county of Louth, being one hundred and thirty feet high, and that of Kildare, or Chilledaire, being one hundred and thirty-three feet high, and only eighteen feet in diameter. The latter extraordinary building, the walls of which are but three feet six inches in thickness, is built of fine white granite to about twelve feet from the ground, and the rest of the blue stone of the country; the door is fourteen feet from the ground. Chilledaire signifies the *wood of oaks*, and was a large ancient forest, comprehending the middle part of the present county of Kildare. In the centre of this wood was a large plain sacred to druidical worship, and now called the Curragh of Kildare, celebrated as a race-course.

Our next subject will be those very ancient and rude structures in both kingdoms, commonly understood to be druidical remains; and first, though briefly, of comlechs. These monuments are called by the Welch *crwm lechew*, or bowing-

stones, because they bowed before them in their ceremonials of religious worship. Both the northern and eastern ancient superstitions ascribed divine qualities to monstrous unhewn stones, which they adored as gods (Grose, vol. i. p. 6). A circle of twelve, with one in the centre representing the prime deity, became a temple, within which they performed sacrifices and other religious ceremonies, elected and inaugurated their kings, and held their courts of justice.

Cairns, or immense conical heaps of stones, raised as a rude monument, are numerous in Ireland; and one can travel but little in the interior without frequently meeting them.

Dr. Macpherson is doubtful whether the cairns in the Scottish isles were reared by the Norwegians or Old Britons of Caledonia; adding, that there are cairns in Aberdeen and Inverness, and in Caernarvonshire, where the northerns never penetrated.

Near the town of Naas, in the county of Kildare, the author saw, among some ancient ruins of a round tower, and other relics, several under-ground caves beneath the circles, such as are alluded to in Ossian. "Go, Ferchios," says the poet, in his Fingal (book v. p. 43), "go to Allad, the gray-haired son of the rock; his dwelling is in the circle of stones." This Allad was a druid, and is called the son of the rock, evidently, from his dwelling in a cave; and the circle of stones is the pale of a druidical temple. The hero then visits the druid, and Allad gives him his answer; the hero's reply to the priest proves the druid's dwelling place to be in the cave. "Allad," said the chief of Cromla, "peace to thy dreams in thy cave." The holiness of caves was as firmly believed in as that of groves, and therein the druids performed divine offices, and taught their disciples.

The architectural antiquities of Ireland, indeed, present a fine unexplored field. There are ruins of between thirty and forty abbeys, of splendid architecture. Those of Jerpoint and of the Black Abbey, in the county of Kilkenny, are, perhaps, finer than any in England, not even excepting the far-famed Netley Abbey, in Hampshire. Then there are their mounts, their cairns, and their caves; their round towers; their ancient cathedrals; and the modern Baalbeck, the deserted city of Killmalloch, in the county of Limerick; likewise the remains of the seven churches at Glendaloch, in the county of Wicklow; and the bed of St. Kieven, immortalized by the muse of the Irish melodist; together with their cromlechs, which rival any in England.

The cromlech at Tobin's Town, in the county of Carlow, forms a sort of rude temple. On the west end is a porch, or portico, formed by two upright pillars, somewhat round but irregular, each eight feet high, terminated behind by a broad flat stone, eight feet high and nine feet broad, which, being set on the edge, makes a portico of six feet wide and four feet deep. This is covered by the large sloping stone, or cromlech, which is twenty-three feet long, eighteen broad at the upper end over the portico, and six feet at the lower or back part, where it rests on small stones about a foot high. Its thickness at the upper end is four feet, and at the lower two. The under surface is plain, and the upper convex. The upper surface has a large channel, from which branch a number of smaller ones: some antiquaries think these natural, others (with more probability) artificial, and intended for sacrificial purposes. The sides are enclosed and supported by several upright stones from three to six feet high, thus forming a room or cell not unlike the Monopteral temples of the Egyptians, eighteen feet long, eight feet wide at the upper or west end, and five at the opposite one; eight feet high in front, and two behind; perfectly secure from every inconvenience of weather. From the portico, westward, is a sort of avenue nearly one hundred and twenty feet long, formed of small, irregular, artificial hillocks. This curious remain of ancient Irish architecture is situated in a low plain field, near a rivulet, on the road from Tullow to Hachetstown.

The other cromlech, at Brown's Town, is in a field about a mile and a half from Carlow; it consists of an immense rock stone, raised on edge from its native bed, and supported at its east end by three rude columns. At a small distance is another pillar by itself, nearly round, and five feet in height. The covering-stone, or cromlech, is twenty-two feet ten inches long, eighteen feet nine inches wide, and four feet six inches thick at the upper part, having nearly two thousand cubic feet of stone, weighing ninety tons, and making, with the horizon, an angle of thirty-four degrees.

A very singular specimen of ancient Irish architecture, which is certainly one of the most curious fabrics in these kingdoms, must be noticed,—the stone-roofed

chapel of the ancient king Cormac, at Cashel, who was, after the patriarchal mode, both king and bishop, and flourished about the year 908 (Ware's Ant. of Ireland, p. 52). It is supposed to have been erected about the year 1134, and dedicated to that celebrated royal priest; and yet Ware, in his Antiquities, says, that when Roderick O'Connor, King of Connaught, in the year 1161, built a stone castle at Tuam, it was considered such an extraordinary work that the natives called it the *Wonderful Castle*. The aforesaid chapel of St. Cormac, at Cashel, is a regular ecclesiastical edifice, divided into a nave and choir, the latter narrowing in breadth, and separated from the nave by a wide arch. Under the altar tradition reports the remains of St. Cormac to be deposited. There is a striking resemblance between this chapel and the church of St. Peter, at Oxford, with Grimbauld's crypt beneath it. Its dimensions, plan, and section may be found in *Grose's Antiquities*, and are well deserving the attention of the student.

Ruby. [Lat. *ruber*, red.] *In gem sculpture.* Name of a gem very difficult to be met with in its most perfect state. There are rubies of different shades of colour, but that the most sought after should be scarlet, or fire colour; it should be soft and velvety in appearance, and throw forth a glow lively and ardent. When these qualities are eminently displayed, no stone is comparable thereto, and its value surpasses even that of the diamond. This species of ruby is undoubtedly that on which the ancients lavished such high encomiums, and which they name *anthrax*, *carlio pyropus*, *carbunculus*, &c.

According to Pliny, the ancients found considerable difficulty in engraving on this stone: many modern artists have essayed upon it, and among them one of the most successful is a German named Hæfler.

Rudder. [*roeder*, Dutch.] *In allegorical painting*, &c. That instrument at the stern of a vessel by which its course is governed.

The ancients sometimes put two rudders to a vessel. According to Athenæus, there were even four to that of Philopater; and Suidas says, that of these four, two were placed at the prow, and two at the stern. Winckelmann, in his *Description des Pièrres de Stosch*, cites a jasper of this collection upon which was engraved a ship without oars, going at full sail, and having two rudders at her stern.

Upon various ancient monuments the rudder is found in the hand of the allegorical figures of *Fortune* or *Abundance*, whilst in the other hand they grasp a cornucopia. This instrument indicates also the riches produced by maritime commerce. The ancients had a custom of detaching the rudder from their vessels on the approach of autumn, when the sea began to grow boisterous, and the return of spring was marked by the replacement of the rudder.

Modern artists have often made this instrument one of the accompanying attributes of the allegorical figure of Hope.

Rudenture. [Fr.] *In architecture.* The figure of a rope or staff, wherewith the flutings of columns are frequently filled up.

Ruins. [*ruina*, Lat. from *ruo*, to fall.] *In architecture.* A term peculiarly applied to magnificent buildings fallen into decay by length of time, and whereof there only remains a confused heap of materials. Such are the ruins of the tower of Belus, two days journey from Bagdat in Syria, on the banks of the Euphrates; which are now no more than a heap of bricks, cemented with bitumen, and whereof we only perceive the plan to have been square. Such also are the ruins of a famous temple, or palace, near Schiras, in Persia, which the antiquaries will maintain to have been built by Ahasuerus, and which the Persians now call Tchelminar, or Chelminar, *q. d.* the Forty Columns, on account of so many columns remaining pretty entire, together with the traces of others, a great quantity of bassi rilievi, and unknown characters, sufficient to show the magnificence of the antique architecture. The most remarkable ruins still existing of entire cities are those of Palmyra and Persepolis, of Herculaneum and Pompeii (see those words).

The superb and stupendous ruins remaining to this day of particular buildings, in Rome, Athens, &c. as of temples, palaces, amphitheatres, aqueducts, baths, &c. it were beyond the plan of this work, and, indeed, would be almost endless to enumerate.

Rule or Ruler. [*regula*, Lat. from *rego*, to govern.] *In mensuration.* An instrument of wood or metal, with several lines delineated on it: of great use in practical mensuration.

Rules of Art. Much diversity of opinion has taken place amongst persons of *virtu* with regard to the propriety or impropriety of paying attention to any given rules of art. Certain philosophical spirits have occupied themselves, at different intervals, in examining works of art analy-

tically, with the view of tracing out the origin of those powerful impressions produced by them upon the mind of sensibility, and in the hope, by means of such discovery, of being enabled to lay down such directions to the future artist as may be almost infallible. Among the foremost of these inquirers, the mass of whom includes philosophers, orators, poets, professed critics, and artists, we may mention the names of Aristotle, Cicero, Horace, Boileau, Pope, Lionardo da Vinci, Rubens, Lairesse, &c. Notwithstanding all their efforts and pains, however, certain critics of the day have not scrupled to declare, that so far from its being desirable to prescribe general rules of art, the practiser of the arts will only feel himself shackled thereby, and will have by no means an equally fair chance of displaying the extent of his genius.

Those who are thus terrified at the idea of established principles of art have not, perhaps, considered duly their real nature. They imagine, probably, that they comprise nothing but insignificant precepts, dictated by the fashion of the time. In this point of view, they are deserving certainly of nothing but neglect: but the fact is, that the true *rules of art* should be founded upon a theory deduced from the very essence and nature of the arts themselves, and not from any extraneous or arbitrary circumstances; and, thus considered, they start at once into importance.

But the word *theory* is indignantly rejected by these objectors to rule. "It is precisely this *theory*," say they, "which is destructive to the genuine exertions, and to the unsophisticated talent of the artist: it binds down the imagination, produces works cold and formal, insipid, and destitute at once of freedom, power, or grace." All this would be true if, through ignorance or error, the word were applied to a false meaning. But it is in art, as in all other things dependent on design and construction; there are certain essential principles inherent in the nature of the several pursuits which cannot be overlooked or violated without risking utterly the agreeableness of the result. At the same time, we are quite ready to admit, that these should be as few and as simple as possible.

Those rules of art which are of real service to the student teach him to distinguish between what is *necessary* to the perfection of his work, and what is *useful* only. They are calculated to direct and suggest, not to enslave. They cannot bestow the power of genius on those who have it not, neither need they for one instant to repress originality, since there is abundant room, *within their limits*, for its exercise. They may, in short, be compared to sign-posts, which are only useful to such as possess the power of proceeding by them, which power they are entirely destitute of means either to increase or diminish.

Rustic. [Lat. *rusticus*, from *rus*, the country.] *In architecture.* A manner of building in imitation of nature rather than according to artificial laws.

The ancients had a method of building with stones smooth only on those sides where the juncture was effected with other stones, their exterior surfaces being left quite rough. This style was adopted from various motives: sometimes economy dictated it; in other instances, want of time; and occasionally a capricious taste, similar to that which leads many men at the present day to have their stone houses painted to imitate brick. At all events, there can be no doubt but that some circumstance which was deemed unlucky at that period originated the peculiarity, which has since grown into an actual separate style, and from its rudeness and want of finish has been denominated *rustic*. Among the great number of fine edifices built by the magnificent and enterprising Romans, many were, doubtless, left imperfect from scarcity of means, or other causes, and these imperfections have, in the eyes of modern speculators, assumed the character of design, and become the objects of imitation.

A species of rustic seems also to have been occasionally practised among the Greeks, an instance of which may be found in the base of the choragic monument called the Lantern of Demosthenes. The kind of work to which it was most frequently applied, and to which, in fact, it is best appropriated, was the construction of walls, and one of the noblest specimens of this nature is the vast wall which surrounded the forum of Nerva, and which is now designated the wall of the arch of Panthanus. The species of rustic employed thereon is a model for all work of that description, and appears to have been imitated at Florence. Its character is bold and grand, without being in the least *outré* or unsightly.

Other examples are to be met with in the aqueduct of Claudius, otherwise called the arch of Drusus, and in the amphitheatres of Pola, in Istria, and of Verona. The ancients, although they often employed *rustic* work in the construction of porticoes, of heavy pillars, and other erections bear-

ing the character of weight and solidity, carefully abstained from applying it to columns, to which it certainly is not at all adapted.

The moderns, as was before hinted, have not been so moderate at all in their introduction of rustic. The celebrated architect Bruneleschi, who sought to impress a character of strength and grandiosity on almost all his works, found rustic a very availing instrument in his hands for that purpose. The old palace at Florence, the Pitti palace, and several others, have their fronts covered with this sort of thing. The other Italian schools of architecture have employed it with less profusion and more taste. Vignola and Palladio introduced it occasionally, and more for the purpose of affording variety of effect than as a uniform and prevailing decoration; more as an accidental kind of caprice than as the indication of a separate style. From Italy, the method of constructing in rustic passed into England, France, and other European countries, and has been, perhaps, oftener turned to account than the exercise of a pure and correct taste would sanction. See Bossage.

Rustic Gods. *In archaiology.* The gods of the country *(dii rustici)*, or those who presided over agriculture, &c. Varro invokes the twelve *dii consentes*, as the prinpal among the rustic gods; namely, Jupiter, Tellus, the Sun, Moon, Ceres, Bacchus, Rubigus, Flora, Minerva, Venus, Lympha, and Good Luck. Besides these twelve arch-rustic gods, there were an infinity of lesser ones; as Pales, Vertumnus, Tutelina, Fulgor, Sterculius, Mellona, Jugatinus, Collinus, Vallonia, Terminus, Sylvanus, and Priapus. Struvius adds the satyrs, fauns, sileni, nymphs, and even tritons; and gives the empire over all to Pan.

Rustic Order. That decorated with rustic quoins, rustic work, &c. *i. e.* where the stones in the face, &c. of the building, instead of being smooth, are hatched or picked with the point of a hammer.

S

Sacome. [Italian, *sacoma.*] *In architecture.* Term applied to the exact profile of every member or moulding; and by some architects (principally French), to the mouldings themselves.

Sacrarium. [Lat.] *In archaiology.* A sort of family chapel in the houses of the Romans. It differed from the *lararium*, inasmuch as that was dedicated to all the household deities without exception, while the *sacrarium* was devoted to some particular divinity. Cicero, in his oration for Milo, speaks, in the 31st chapter, of the *Sacrarium de la Bona Dea*, in the country of Titus Sextus Gallus. The name was also given to that particular portion of the ancient temples wherein the sacred things were deposited.

Sacrifice. [Lat. *sacrificium*, from *sacer*, holy, and *facio*, to do.] *In archaiology.* All the nations of antiquity were, at one period or other of their history, addicted to the offering up of sacrifices. It is not to our present purpose to institute inquiry into the origin of the practice. It is by some attributed to the Phœnicians, by others to the Egyptians; while Ovid imagines, from the import of the words *victim* and *hostia*, that no bloody sacrifices were offered till wars prevailed in the world, and nations obtained victories over their enemies. These, however, are mere hypotheses, not borne out by historical research or tradition, and entitled to little regard.

That part of the subject which is likely to be of service to the artist, and which we shall immediately proceed to investigate, is the method in which sacrifices were wont to be offered up: an acquaintance with which is not only calculated to act as a guide in any work he may himself project, but will afford an explanation to such numerous relics of antiquity (sculptures, frescoes, &c.), as bear representations of this nature.

Of the various kinds of Jewish sacrifices, and the subordinate ends for which they were offered, a full account is given in the books of Moses. When an Israelite offered a loaf or a cake, the priest broke it in two parts; and, setting aside that half which he reserved for himself, broke the other into crumbs, poured oil, wine, incense, and salt upon it, and spread the whole upon the fire of the altar. If these offerings were accompanied with the sacrifices of an animal, they were thrown upon the victim, to be consumed along with it. If the offerings were of the ears of new corn, they were parched at the fire, rubbed in the hand, and then offered to

the priest in a vessel, over which he poured oil, incense, wine, and salt, and then burnt it upon the altar, having first taken as much thereof as of right belonged to himself.

The principal sacrifices among the Hebrews consisted of bullocks, sheep, and goats; but doves and turtles were accepted from those who were not able to bring the other; these beasts were to be perfect, and without blemish. The rites of sacrificing were various, and all are very minutely described in the books of Moses.

The manner of sacrificing among the Greeks and Romans was as follows. In the choice of the victim, they took care that it was without blemish or imperfection: its tail was not to be too small at the end; the tongue not black, nor the ears cleft; and the bull was to be one that had never been yoked. The victim being pitched upon, they gilt the forehead and horns, especially if a bull, heifer, or cow. The head they also adorned with a garland of flowers, a woollen *infula* or holy fillet, whence hung two rows of chaplets with twisted ribands; and on the middle of the body a kind of stole, pretty large, hung down on each side: the lesser victims were only adorned with garlands and bundles of flowers, together with white tufts or wreaths.

The victims thus prepared were brought before the altar; the lesser being driven to the place, and the greater led by a halter: when, if they made any struggle, or refused to go, the resistance was taken for an ill omen, and the sacrifice frequently set aside. The victim thus brought was carefully examined, to see that there was no defect in it; then the priest, clad in his sacerdotal habit, and accompanied with the sacrificers and other attendants, and being washed and purified according to the ceremonies prescribed, turned to the right hand, and went round the altar, sprinkling it with meal and holy water, and also besprinkling those who were present. Then the crier proclaimed with a loud voice, Who is here? To which the people replied, Many and good. The priest then, having exhorted the people to join with him, by saying, Let us pray, confessed his own unworthiness, acknowledging that he had been guilty of divers sins; for which he begged pardon of the gods, hoping that they would be pleased to grant his requests, accept the oblations offered them, and send them all health and happiness; and to this general form added petitions for such particular favours as were then desired. Prayers being ended, the priest took a cup of wine, and, having tasted it himself, caused his assistants to do the like; and then poured forth the remainder between the horns of the victim. Then the priest or the crier, or sometimes the most honourable person in the company, killed the beast, by knocking it down or cutting its throat. If the sacrifice was in honour of the celestial gods, the throat was turned up towards heaven; but if they sacrificed to the heroes or infernal gods, the victim was killed with its throat towards the ground. If by accident the beast escaped the stroke, leaped up after it, or expired with pain and difficulty, it was thought to be unacceptable to the gods. The beast being killed, the priest inspected its entrails, and made predictions from them. They then poured wine, together with frankincense, into the fire, to increase the flame, and then laid the sacrifice on the altar; which in the primitive times was burnt whole to the gods, and thence called a *holocaust*; but in after times, only part of the victim was consumed in the fire, and the remainder reserved for the sacrificers; the thighs, and sometimes the entrails, being burnt to their honour, the company feasted upon the rest. During the sacrifice, the priest, and the person who gave the sacrifice, jointly prayed, laying their hand upon the altar. Sometimes they played upon musical instruments in the time of the sacrifice, and on some occasions they danced round the altar singing sacred hymns in honour of the gods.

The abominable practice of human sacrifices followed that of offering brutes. When men had gone so far as to indulge the fancy of bribing their gods by sacrifice, it was natural for them to think of enhancing the value of so cheap an *atonement* by the cost and rarity of the offering; and, oppressed with their malady, they never rested till they had got to that which they conceived to be the most precious of all, a human sacrifice. "It was customary (says Sanchoniathon), in ancient times, in great and public calamities, before things became incurable, for princes and magistrates to offer up in sacrifice to the avenging demons the dearest of their offspring." Sanchoniathon wrote of Phœnicia, but the practice prevailed in every nation under heaven of which we have received any ancient account. The Egyptians had it in the early part of their monarchy. The Cretans likewise had it, and retained it for a longer time. The nations of Arabia did the same. The people of Dumah, in

particular, sacrificed every year a child, and buried it underneath an altar, which they made use of instead of an idol; for they did not admit of images. The Persians buried people alive. Amestris, the wife of Xerxes, entombed twelve persons quick under ground for the good of her soul. It would be endless to enumerate every city, or every province, where these dire practices obtained. The Cyprians, the Rhodians, the Phoceans, the Ionians, those of Chios, Lesbos, Tenedos, all had human sacrifices. The natives of the Tauric Chersonesus offered up to Diana every stranger whom chance threw upon their coast. Hence arose that just expostulation in Euripides upon the inconsistency of the proceeding; wherein much good reasoning is implied. Iphigenia wonders, as the goddess delighted in the blood of men, that every villain and murderer should be privileged to escape, nay, driven from the threshold of the temple; whereas, if an honest and virtuous man chanced to stray thither, he was only seized upon, and put to death. The Pelasgi, in a time of scarcity, vowed the tenth of all that should be born to them for a sacrifice, in order to procure plenty. Aristomenes the Messinian slew three hundred noble Lacedæmonians, among whom was Theopompus the king of Sparta, at the altar of Jupiter at Ithome. Without doubt the Lacedæmonians did not fail to make ample returns; for they were a severe and revengeful people, and offered the like victims to Mars. Their festival of the Diamastigosis is well known; when the Spartan boys were whipped in the sight of their parents with such severity before the altar of Diana Orthia, that they often expired under the torture. Phylarchus affirms, as he is quoted by Porphyry, that of old every Grecian state made it a rule, before they marched towards an enemy, to solicit a blessing on their undertakings by human victims.

The Romans were accustomed to the like sacrifices. They both devoted themselves to the infernal gods, and constrained others to submit to the same horrid doom. Hence we read in Titus Livius, that, in the consulate of Æmilius Paulus and Terentius Varro, two Gauls, a man and a woman, and two in like manner of Greece, were buried alive at Rome in the ox market, where was a place under ground, walled round, to receive them; which had before been made use of for such cruel purposes. He says it was a sacrifice not properly Roman, that is, not originally of Roman institution; yet it was frequently practised there, and that too by public authority. Plutarch makes mention of a like instance a few years before, in the consulship of Flaminius and Furius. There is reason to think, that all the principal captives who graced the triumphs of the Romans were, at the close of that cruel pageantry, put to death at the altar of Jupiter Capitolinus.

The Gauls and the Germans were so devoted to this shocking custom, that no business of any moment was transacted among them without being prefaced with the blood of men. They were offered up to various gods; but particularly to Hesus, Taranis, and Thautates. These deities are mentioned by Lucan, where he enumerates the various nations who followed the fortunes of Cæsar.

The altars of these gods were far removed from the common resort of men; being generally situated in the depth of woods, that the gloom might add to the horror of the operation, and give a reverence to the place and proceeding. The persons devoted were led thither by the druids, who presided at the solemnity, and performed the cruel offices of the sacrifice. Tacitus takes notice of the cruelty of the Hermunduri, in a war with the Catti, wherein they had greatly the advantage; at the close of which they made one general sacrifice of all that were taken in battle. The poor remains of the legions under Varus suffered in some degree the same fate. There were many places destined for this purpose all over Gaul and Germany; but especially in the mighty woods of Arduenna, and the great Hercynian forest; a wild that extended above thirty days journey in length. The places set apart for this solemnity were held in the utmost reverence, and only approached at particular seasons. Lucan mentions a grove of this sort near Massilia, which even the Roman soldiers were afraid to violate, though commanded by Cæsar. It was one of those set apart for the sacrifices of the country.

These practices prevailed among all the people of the north, of whatever denomination. The Massagetæ, the Scythians, the Getes, the Sarmatians, all the various nations upon the Baltic, particularly the Suevi and Scandinavians, held it as a fixed principle, that their happiness and security could not be obtained but at the expense of the lives of others. Their chief gods were Thor and Woden, whom they thought they could never sufficiently glut with blood. They had many very celebrated places of worship; especially in the island

of Rugen, near the mouth of the Oder; and in Zealand: some, too, very famous among the Semnones and Naharvalli. But the most reverenced of all, and the most frequented, was at Upsal; where there was every year a grand celebrity, which continued for nine days. During this term they sacrificed animals of all sorts: but the most acceptable victims, and the most numerous, were men.

The manner in which the victims were slaughtered was diverse in different places. Some of the Gaulish nations chined them with a stroke of an axe. The Celtæ placed the man who was to be offered for a sacrifice upon a block, or an altar, with his breast upwards, and with a sword struck him forcibly across the sternum; then tumbling him to the ground, from his agonies and convulsions, as well as from the effusion of blood, they formed a judgment of future events. The Cimbri ripped open the bowels; and from them they pretended to divine. In Norway they beat men's brains out with an ox-yoke. The same operation was performed, in Iceland, by dashing them against an altar of stone. In many places they transfixed them with arrows. After they were dead they suspended them upon the trees, and left them to putrify. One of the writers above quoted mentions that, in his time, seventy carcasses of this sort were found in a wood of the Scevi. Dithmar of Mersburgh, an author of nearly the same age, speaks of a place called *Ledur*, in Zealand, where there were every year ninety-nine persons sacrificed to the god Swantowite. During these bloody festivals a general joy prevailed, and banquets were most royally served. They fed, caroused, and gave a loose to indulgence, which at other times was not permitted. They imagined that there was something mysterious in the number nine: for which reason these feasts were in some places celebrated every ninth year, in others every ninth month; and continued for nine days. When all was ended, they washed the image of the deity in a pool; and then dismissed the assembly. Their servants were numerous, who attended during the term of their feasting, and partook of the banquet. At the close of all, they were smothered in the same pool, or otherwise made away with. On which Tacitus remarks, how great an awe this circumstance must necessarily infuse into those who were not admitted to these mysteries.

The sacrifices of which we have been treating, if we except some few instances, consisted of persons doomed by the chance of war, or assigned by lot, to be offered. But among the nations of Canaan the victims were peculiarly chosen. Their own children, and whatever was nearest and dearest to them, were deemed the most worthy offerings to their god. The Carthaginians, who were a colony from Tyre, carried with them the religion of their mother country, and instituted the same worship in the parts where they settled. It consisted in the adoration of several deities, but particularly of Kronus; to whom they offered human sacrifices, and especially the blood of children. If the parents were not at hand to make an immediate offer, the magistrates did not fail to make choice of such as were most fair and promising, that the god might not be defrauded of his dues. Upon a check being received in Sicily, and some other alarming circumstances happening, Hamilcar, without any hesitation, laid hold of a boy, and offered him on the spot to Kronus; and at the same time drowned a number of priests, to appease the deity of the sea. The Carthaginians another time, upon a great defeat of their army by Agathocles, imputed their miscarriages to the anger of this god, whose services had been neglected. Touched with this, and seeing the enemy at their gates, they seized at once three hundred children of the prime nobility, and offered them in public for a sacrifice.

Sacristy. [Lat. *sacrista* or *sacristarius*, a keeper of holy things.] *In architecture.* An apartment in a church wherein the sacred vessels and other utensils were kept, being the same with our vestry. See Vestry.

Saddle. [ꞅaðl, Saxon, *sadel*, Dutch.] *In archaiology.* In the earlier ages the Romans used neither saddle nor stirrups. Thus an antiquarian writer has remarked in several parts of his works, that the Roman cavalry were subject to sundry maladies and accidents of the hips and legs from the want of some support for their feet. Hippocrates had already made the observation that the Scythians, who were much on horseback, were incommoded by defluxions in the legs from the same cause. In less remote times, the Romans placed upon their horses a square pannel, or species of covering which enabled them to sit less hardly. This they termed *ephippium*.

Sagittarii. [Lat. from *sagitta*, an arrow.] See Daricks.

Sagum. [Lat. from Gr. σάγος, a soldier's cloak.] *In ancient costume.* A garment appropriated to warriors among the Romans. It was indeed a symbol of war, as

the *toga* was of peace. The *sagum* was a mantle of white wool, generally attached with a clasp or hook, and the shape of which was similar to that of the *paludamentum* of the generals, from which it differed in colour and ornaments only. Some authors have defined the *sagum* as a military tunic, but several passages of Tacitus and Pliny show that it was without sleeves, and was more ample than the tunic. The emperor Caracalla had imagined, or imitated from the Gauls, a particular kind of *sagum*, to which the emperor's name was assigned, and so fond is he represented to have been of his adopted garment, that he preferred it to any other, distributed a large number among the people and soldiers, and even required that all who approached his presence should wear this vestment.

The precise form of the *caracalla* is not now to be ascertained. It has been described as a garment made of several pieces diversely embroidered, and descending to the heels, excepting in the instances of the soldiers, who wore it shorter.

The *sagum* of the Gauls had many points of difference from that of the Romans. It had sleeves, and more resembled the Roman tunic. According to Diodorus Siculus, it was constructed of various colours, enriched with purple bands, and with pieces of stuff shaped like flowers.

The *sagum*, generally speaking, may be defined as a military habit, open from top to bottom, and usually fastened on the right shoulder with a buckle or clasp. It approximated in shape to the Χλάμυς (see CHLAMYS) of the Greeks, and, as has been mentioned, to the *paludamentum* of the generals. The only difference between them was, that the *paludamentum* was made of richer stuff, was generally of a purple colour, and both longer and fuller than the *sagum*.

SAIL. [seɡl, Saxon, *seyhel, seyl*, Dutch.] *In archaiology.* In ancient times, the substance whereof sails were composed was either flax, rush, broom, leather, or the skin of beasts. Cæsar remarks that the Venetians had sails made of the latter substance. In the age of Homer they were all flaxen. The ancients gave to their sails three different forms; one triangular, as was commonly used in the vessels of the Mediterranean; another square, chiefly adapted to very small vessels; and a third round, much used by the Portuguese in the Indies. At first sails were only spread in favourable winds. They were frequently of a blue colour, which was subsequently tinged, as luxurious habits advanced, with purple. Several antique monuments, and especially the paintings of Herculaneum (vol. 2), present us vessels with flying sails.

SALOON. [Fr. *salon.*] *In architecture.* A spacious and lofty sort of hall, vaulted at top, and usually comprehending two stories, with two ranges of windows. The saloon is a grand room in the middle of a building, or at the head of a gallery, &c. Its faces or sides should all have a symmetry with each other; and as it commonly takes up the height of two stories, its cieling should be with a moderate sweep. The saloon is a state room much used in the palaces of Italy, where the balmy and luxuriant nature of the climate renders airy and spacious apartments desirable; and from thence it travelled into France and England. People of distinction are generally received by the master of a house in the saloon. It is sometimes built square, sometimes round or oval, sometimes octagonal (as at Marly), and sometimes in other forms.

SALUTATORIUM. Another term for the SACRISTY (which word see).

SAMARITAN. [from *Samaria.*] *In painting, sculpture, &c.* Under this name is designated every work of art representing the Samaritan woman spoken of by the evangelists as standing near a well, cistern, or fountain, and in the act of drawing the water. The figure of this scripture character is generally accompanied by that of Christ. Nevertheless, Boldetto states, that he visited a chapel in the cemetery of St. Calista, where, among other pictures, he remarked the Samaritan standing alone. At the second arch of the *Pont-Neuf* at Paris, on the side of the Louvre, an hydraulic building was constructed in the reign of Henry the Third, destined to distribute water through the various parts of Paris. Having been destroyed in 1712, this erection was rebuilt afterwards with care and taste. It is composed of three stories, the second of which is level with the bridge, while the sides have five windows at every story, and the front two. Between these two last mentioned windows was a piece of rustic-work, the base of which was filled by a group representing Christ in conversation with the Samaritan near Jacob's well, which was indicated by a basin into which fell a sheet of water, issuing from a shell above. The figure of Christ was by Bernard, and that of the Samaritan woman by Frémin, able sculptors. Under the basin was sculptured this Latin inscription:—*Fons Lortorum, puteus aquarum viventium.* This piece

of workmanship was repaired anew in 1775; and the group and the shell were regilded. Some years since both these latter were destroyed again; but in spite of this defacement, the little building retained, up to a recent period, the name of *Fontaine de la Samaritaine.*

SANCTUARY. [Lat. *sanctuarium,* from *sanctus.*] *In architecture.* Among the Jews this name was given to the most sacred and retired part of the temple of Jerusalem, wherein was deposited the ark of the covenant, and which was also denominated *sanctum sanctorum.* Into this place none were permitted to enter save the high priest, and he only once a year, to intercede for the people. Some authors distinguish the sanctum sanctorum (or holiest of holies) from the *sanctuary,* affirming that the latter term implied generally the whole temple. In the temples of the Greeks and Romans there was likewise a sanctuary, designated ADYTUM. See that word.

In the Romish church, the term is applied to that part of the building where the high altar is placed, accompanied by a rail or balustrade. In the ancient English customs, it is synonymous in meaning with *asylum.*

SAND. [Danish and Dutch.] *In construction and laying out pleasure grounds.* A kind of gravel extremely fine and various in hue. Sea or river sand is by some considered to make the best mortar, and to be most advantageous for garden walks.

SANDAL. [Lat. *sandalium,* from Gr. σανδάλιον.] *In costume.* A rich kind of slipper worn on the feet by the Greeks and Romans, and made of gold, silk, or other precious stuff. It consisted of a sole, with a hollow at one extreme to embrace the ancle, but left the upper part of the foot bare. It was fastened on with leather strings or ribands, which crossed several times round the lower part of the leg. Besides these sandals, the ancients used also other coverings for the feet, which, like those of our own day, left no part bare. Those, indeed, oftener ascended as high as the ancle, and even the calf of the leg. The proper term given by the Romans to this latter article of dress was *calceus.* These were, however, generally regarded as troublesome and uneasy. The wearers took care to provide them of leather extremely supple, which was termed *aluta,* derivative of *alumen,* alum, that substance being employed to produce the requisite softness. The Roman matrons, when assembled on occasions of solemnity, wore the *alutæ* of white leather: the courtesans, on the other hand, preferred the sandal, of elegant shape and handsomely embroidered, this not hiding at all the shape of a pretty foot. For this reason, Ovid, in his *Art of Love,* counsels these amiable fair to conceal their feet, if ill made, in an *aluta* of dazzling white. Artists, in painting subjects from ancient history, generally prefer using the sandal, or *solea,* on account of its giving a more picturesque air to the figure.

Sandal is likewise a slipper, or shoe, worn by the pope and other Romish prelates when they officiate. It is, besides, the name of a sort of slipper worn by several congregations of reformed monks. This last species consists of nothing else than a mere leathern sole, fastened with latches or buckles, all the rest of the foot being left bare. The capuchins wear sandals; the recollets clogs. The former are of leather, and the latter of wood.

SANGUINE. [Lat. *sanguis,* blood.] *In drawing and gilding.* A kind of oxyde of iron, solid and compact, of a red brown, smooth to the touch, by no means sandy, and ductile in working. It is employed frequently in the arts of design, and the gilder uses it to produce a polish. It is preserved cool and soft in leaden boxes.

SAPPHIRE. [Gr. σαπφειρος.] *In gem sculpture.* A genus of precious stones, of a blue colour, and the hardest of all except the ruby and diamond. They are found in the same countries with the ruby; also in Bohemia, Alsace, Siberia, and Auvergne. M. Romé de l'Isle mentions one found at Auvergne, which appeared quite green or blue according to the position in which it was placed.

The blue stone to which the ancients applied the name of sapphire was different from ours: it was spotted with golden spangles: it was, indeed, the same as the *lapis lazuli.*

The finest sapphires, like most other gems, come from the East Indies. In Scotland, also, they have been found of a hardness and lustre equal to the oriental. Mr. Deuchar, seal-engraver at Edinburgh, had in his possession a beautiful sapphire, which was cut in a double crystal. On one of these was cut a head, which, however, was effected with great difficulty on account of its hardness. The other is cut into facets, has a fine water, and great brilliancy.

The fine hard sapphires, called by the jewellers *oriental,* are of the same nature with the ruby and topaz, from which they differ only in colour. The late unfortunate Louis XVI. of France had one with a stripe of fine yellow topaz in the middle.

Some are found half green and half red, and are foliated like the ruby.

Saracenic Architecture. Egypt and Syria present many specimens of Saracenic architecture, which form a striking contrast with the ancient Egyptian and Greek styles. The Saracens, in Egypt, have borrowed but little (if any) of their style from the aborigines of the country. The style called Saracenic, which is justly supposed to have been the parent of the Gothic, is distinguished by the boldness and loftiness of its vaultings; the peculiar mixed form of its curves; the slenderness of its columns; the variety of its capitals; the prodigious multiplicity of its mouldings and ornaments: presenting a strong assemblage of friezes, musaics, foliage, and arabesques, interlaced with flowers, and disposed altogether with much skill.

The *Egyptian Saracenic* differs from the *Spanish* principally in the form of the arch, as may be seen by comparing the gate of Cairo with that of the Alhambra in Grenada, or the great church at Cordova. Among the principal remains of the former style are the walls of Alexandria, built, in 878, by the Caliph Motahwakkel; several arcades of the aqueduct of Alexandria, which are distinguished by the medley of the capitals; the greater and the smaller pharos, the mosque and the ancient palace of the sultans, in the same city: there are also several buildings of the sultan Saladin, whose real name was Joseph or Jussuf, which bear his latter appellation, as the walls at Cairo, the Granaries, &c.

The Moorish, or Mauresque, is but a variation on the Saracenic: yet, as Millin, in his *Antiquités Nationales*, uses the term, it is, in deference to his authority, preserved here. Its examples are not numerous, and may be found in his *Dictionnaire des Beaux Arts*.

These several styles, though of various dates, are either of the period of, or have emanated from, the immersion of architecture in the dark or middle ages.

Sarcophagus. [Gr. σαρκοφάγος, from σαρξ, flesh, and φάγω, to eat.] *In architecture.* Name of a stone found, according to Pliny, in the Troad, and of which tombs were constructed on account of its caustic qualities. It is said to have perfectly consumed the flesh of human bodies buried in it in the space of forty days. This property, for which it was greatly celebrated, is mentioned by all the ancient naturalists. There was, besides, another singular quality attached to this stone: but whether to its entire mass, or only to particular pieces, is not thoroughly known; that is, its power of turning into stone whatever was deposited in vessels made of it. This is recorded only by Mutianus and Theophrastus, except that Pliny had copied it from these authors, and some of the later writers on these subjects from him.

The custom of burying the dead is of great antiquity, as is likewise that of burning their bodies. Mythology attributes the latter mode to Hercules, while it assigns the earliest usage of the former method to the primitive Greeks and Romans. In the Greek colonies of Italy they buried, as we do, the entire body; and even when the custom of burning the body obtained among the Romans, several families retained that of interment.

But the term sarcophagus is by no means limited to a particular kind of stone. Indeed, its more generally accepted meaning is a sort of coffin or grave itself. This kind of sepulchral chest was made, among the ancients, either of stone, of marble, or porphyry. The Greeks also sometimes employed hard wood, which was calculated to resist humidity, such principally as oak, cedar, or cypress. Occasionally *terra cotta*, and even metal.

The form of these *sarcophagi* was ordinarily a parallelopipedon—namely, a long square, such as our coffin. Sometimes the angles were rounded, thus assuming an elliptical shape. It was not usual for these funeral chests to narrow downwards, as, for instance, the species of bathing tub called *labrum*.

The lid of the sarcophagus varies also both in shape and ornament. Sometimes it bears the statue of the person inhumed therein, often lying down in the posture used by the ancients as they took their meals. The capacity or size of the *sarcophagi* was also of course very various. Those of the primitive Christians, destined to enclose several corpses, had often two several sets of bassi rilievi.

The workmanship on the *sarcophagi* of the ancients is frequently of a very high order. The figures sculptured or engraved thereon are either those of the parties connected immediately with the history of the deceased, or the heroic, half-fabulous personages of mythology. Achilles detected by Ulysses among the daughters of Lycomedes; Venus surprised by Vulcan in the embraces of Mars; Orestes, the parricide, pursued by the Furies; the combats of the Centaurs and Lapithæ;—these are among the subjects very often treated on these monuments. Sometimes the young warrior is characterised by any given hero of antiquity; and the sarcophagus represents the condemnation

of Hyppolytus by his father Theseus; the death of Phaëton, who could not escape his evil destiny, although son to the god of day; the death of Patroclus announced to Achilles by Antilochus; that of Hector announced to his father Priam, &c.

The ancients were fond of denominating death a sleep: sleep and death are with them brothers, and are often placed on the sides of the sarcophagus. Often also, by an ingenious allegory, the artists represented the eternal sleep of the pale inhabitant of the sarcophagus by some celebrated mythological slumber:—such, for instance, as the sleep, on Latmos, of Endymion visited by Diana; of Thetis, surprised during her sleep by Peleus; or of Ariadne, who, slumbering full of grief and regrets after the abandonment of Theseus, is awakened by the approach of the divine and conquering Bacchus.

At other times the figures on the *sarcophagi* were moral or allegorical. The twelve Labours of Hercules, so often found upon the tombs of the thirteenth and fourteenth centuries, present an ingenious allegory of the triumph of Virtue over the Passions. The various seasons, which are likewise frequently depicted thereon, are of course emblematical of the several ages of man. Occasionally the profession or peculiar taste of the deceased is indicated, as in the three *bassi rilievi*, wherein the figure of a young poet is introduced standing encircled by the Muses. In fact, these ancient monuments present almost every variety of decoration, in some instances bearing an obvious relation to the person entombed, in others to subjects of a general, a political, or a religious character.

Certain *sarcophagi* have never contained the entire corpse of the deceased person, but merely an urn enclosing his or her ashes. This is the case with that regarded as having been appropriated to Alexander Severus, wherein was found the beautiful glass urn or vase at present in the British Museum, and called the PORTLAND VASE (which refer to).

SARDONYX. [Gr. σαρδόνυξ, from σαρδιος, the Sardinian stone, *i. e.* cornelian, and ὄνυξ, the human nail.] *In gem sculpture.* Name of a precious stone consisting of a mixture of the chalcedony and cornelian, sometimes blended together, sometimes in different strata. It is found—1. Striped with white and red strata, which may be cut in *cameo* as well as the onyx. 2. White with red dentrilical figures, greatly resembling the mocha stone; but with this difference, that the figures in the sardonyx are of a red colour, in the other black. There is no actual difference (excepting in the circumstance of hardness) between the onyx, cornelian, agate (see those words), chalcedony, and sardonyx, notwithstanding the different names bestowed on them. Mongez informs us, that the yellow or orange coloured agates, with a wavy and undulating surface, are now commonly denominated *sardonyx*.

The sardonyx was highly esteemed among the ancients; the Romans fashioning it into rings and other articles of jewellery. According to Pliny, the rings of the knights and senators were frequently enriched with the sardonyx. Martial uses the expression *sardonychata manus* to indicate a hand embellished with rings of sardonyx.

SATURN. *In mythological painting and sculpture.* Saturn, the most remote of the planets, and one of the oldest of the fabulous deities, is represented as very aged and decrepid, with fetters on his feet, to denote the slowness of his motion, and a pruning hook in his hand; from a tradition that, after his being dethroned by Jupiter, he took refuge in Italy, and introduced there several parts of agriculture, particularly the art of pruning and managing the vines. In his character of presiding over time, he has wings on his shoulders, as well as shackles on his feet. In his left hand he sometimes holds a child, which he raises up as if instantly to devour it: in allusion to his affectionate plan of swallowing all his male children.

Tatius, king of the Sabines, first built a temple to Saturn on the Capitoline Hill: a second was afterwards added by Tullus Hostilius, and a third by the first consuls. On his statues were generally hung fetters, in commemoration of the chains he had worn when imprisoned by Jupiter. From this circumstance, all slaves that obtained their liberty generally dedicated their fetters to him.

In the outer round of a gem (in Baron Stosch's collection at Florence), are the seven planets in chariots. Saturn is drawn by two serpents; Jupiter by two eagles; Mars by two horses, and Sol by four; Venus by two doves; Mercury by two cocks, and Luna by two stags. In the next round are the twelve signs of the Zodiac; and in the centre is a person playing on two pipes, to signify the harmony of the universe, or what we vulgarly call the *music of the spheres.* This is reckoned a great curiosity.

SATURNALIA. [from *Saturn.*] *In archaiology.* A festival observed about the middle of December, in honour of the god Saturn, whom Lucan introduces giving an

account of the ceremonies observed on this occasion, thus:—"During my whole reign, which lasts for one week, no public business is done; there is nothing but drinking, singing, playing, creating imaginary kings, placing servants with their masters at table, &c. There shall be no disputes or reproaches; but the rich and poor, masters and slaves shall be equal, &c." On this festival the Romans sacrificed bareheaded, contrary to their custom at other sacrifices, and the statues of the god were unfettered.

Satyrs. [Gr. σατυρὸς, from σαθη, *pudendum virile*, in allusion to the fabled lasciviousness of those beings.] *In mythological painting and sculpture.* A species of demigods who dwelt in the woods. They are represented as monsters, half men and half goats; having horns on their heads, a hairy body, with the feet and tail of a goat. They are generally in the train that follows Bacchus; but the poets supposing that they were remarkable for piercing eyes and keen raillery, they have been placed in the same pictures with the Graces, Loves, and even with Venus herself.

Saw. [*sawe*, Danish, ꝥaꝫa, Saxon.] *In joinery, &c.* An instrument serving to cut into pieces several solid matters, such as wood, stone, ivory, &c.

The Greeks attributed the invention of this instrument either to Dædalus, or to his *protégé* Talus; we find it upon the obelisks of the Egyptians. The best saws are of tempered steel, ground bright and smooth: those of iron are only hammer-hardened; hence the first, besides their being stiffer, are likewise found smoother than the last. They are known to be well hammered by the stiff bending of the blade; and to be well and evenly ground by their bending equally in a bow.

Saxon Architecture. See Architecture.

Scagliola. [Italian.] *In architecture.* The name of a composition from a certain transparent calcareous stone, ranged as a gypsum. To make this composition, selenites is calcined, and reduced into a fine powder, which is mixed with the quantity of water necessary to constitute a paste, which they take care to knead well. With it is formed, after a certain consistence has been attained, a mould shaped into flowers, fruits, architectural designs, &c., and the hollow being filled with the same composition, but coloured as the nature of the subject may require, when all is dry and well hardened, a high polish is added, and we find a solid tablet, apparently covered with crystals.

The art of working in scagliola is indigenous to the town of Carpi, in Modena, where it has reached the highest point of perfection. The honour of inventing it is due to Guido del Conte, called Fassi, born at Carpi in 1584.

Scala Santa. [Italian.] Thus is denominated a portico near the church of St. John de Latran, at Rome, which presents five arcades in front, with three flights of a staircase. The middle one purports to have been made out of several steps once belonging to the house of Caiaphas, and which were brought from Jerusalem to Rome on account of their having served as a passage for the holy Jesus when he was transferred from Caiaphas to Pilate. These original steps, to the number of twenty-eight, are covered over with marble, in order that they may be preserved. The *Scala Santa*, which is ascended kneeling, is daily a subject of devotion and of pilgrimage to Rome.

Scantling. [*eschantillon*, Fr.] *In architecture.* A small quantity or proportion, cut out for a particular purpose.

Scaphium. [Lat.] *In archaiology.* A drinking cup, or vase, in the shape of a boat.

Scarabeus. [Lat.] *In archaiology.* Name of an insect which was held in great veneration by the Egyptians. There were three varieties; but that most celebrated and which is alone to be found represented on ancient monuments, is the *scarabeus sacer* of the naturalists. This is perceived on the Isiac table; and is frequent among hieroglyphics: it passed as the symbol of immortality, and as the emblem of the sun. Another species was consecrated to Isis, and indicated the moon; its two horns resembling the crescent of that planet. According to Caylus, the Egyptians were in the constant habit of giving the shape of the scarabeus to their amulets or rings.

Scene. [Gr. σκηνή.] *In painting.* The original meaning of this word is an alley, or rural portico destined to provide shade, or to keep off the injuries of the weather. Cassiodorus says (according to Rollin), that it was at first in such places as this that theatrical pieces were represented. At length, applied specifically to the complete edifice called a theatre, it indicated primitively the wall which forms the back part of the stage. It was, however, oftener used, in a more extended sense, for the entire stage; but subsequently was limited to the meaning which it now has. According to Vitruvius, there were three special scenes appertaining to the theatres of the ancients:—the *tragic*, the *comic*, and

the *satiric*. The custom was to display, upon the sides of these, buildings ornamented with statues and columns; and at the back of the stage, other edifices—more particularly, a splendid palace or temple, for a tragedy; a house or street, for a comedy; a forest, mountain, cavern, or landscape, for a pastoral. These decorations were either rotatory, as when they turned upon a pivot, or sliding, as when fixed in a groove, as is the present practice.

Scene Painting. This department of painting forms a walk of art both peculiar and extensive, which has its own laws, its own practical and scientific rules, in the same way as perspective has. The follower of scene painting should, in the first place, be deeply conversant with that particular knowledge, by means of which he is enabled to decide on the effects of those colours he employs by day, when they shall be subjected to a strong artificial light. In the next instance, it is absolutely indispensable that he should be well versed in the rules of both linear and aerial perspective. He traces, by fixed geometrical operations, lines bent or inclined, which the spectator, placed at the proper point of view, imagines to be straight ones. He employs gradual diminutions of plans which give the appearance of an extent and distance existing merely in his own art; thus in a few fathoms to which he is bounded expressing an extent sometimes almost infinite. He uses chiefly water colours, on account of their operating promptly, and presenting no glossy surface.

Two kinds of light are to be principally regarded in scene painting. One the light which the painter supposes to illuminate the objects of his performance; the other that which actually does light up the canvass: and in this respect the scene painter possesses a great advantage over every other, in multiplying, combining, and contrasting to his taste, the number and force of the hidden lights with which he radiates his work.

But, on the other hand, the scene painter has to contend with difficulties peculiar to his confined walk of art. The necessity of giving a brilliant light to the audience part of the house is often destructive to the truth and delicacy of those tints which the artist applies to his scene; while, in addition, the perspective is frequently contradicted and violated by the actor moving about at the very back of the stage; when all those objects placed there, which, whilst the performer kept in front (where every thing is suited to his actual size), appeared in due proportion, lose their verisimilitude, and appear insignificant and disproportioned. The man becomes as tall as the rock or tree, and the imagination of the spectator has not power sufficient to preserve the illusion of the scene. This latter disadvantage, which can scarcely be obviated, the artist would do well, nevertheless, to keep constantly in mind, and to modify as much as possible: and the actor also, if he is desirous of rendering the representation a perfect one, will remain as little as he can at the back part of the scene.

As the scene painter is frequently called on to decorate the places represented with statues, &c. it is necessary that he should be able to draw well the human figure: he should also possess some relish for, as well as knowledge of, the *chefs-d'œuvre* of ancient art; and should take care not to violate consistency by placing, for instance, in a Grecian temple, affected or mutilated statues. In addition to these qualifications, architectural and landscape painting should enter into his course of study, as their use, and, indeed, necessity, must be self-evident.

To the scene painter the use of brilliant colours, of skilful *chiaro-scuro*, of striking management of masses of light and shade, is obvious. He addresses less the heart or understanding than the eye. With him *effect* is every thing. His fame, as well as his works, is commonly of short duration; and there is consequently the greater reason that he should acquire that promptness and decision of style which would secure immediate approbation.

For a performance of this description to be eminently successful, it is requisite that it should be not only well painted and striking in effect, but that it should be also *appropriate*—in good *costume*: it should conform, in style and in taste, to the manners and usages of the people amongst whom the scene is placed.

Scenography. [Gr. σκηνογραφία, from σκηνὴ, a scene, and γράφω, to write.] *In painting*, &c. This is, properly speaking, the art of painting scenes and decorations: but the word likewise expresses the art of representing a building, town, or landscape in perspective. It has also been sometimes appropriated to the representation of some edifice in *rilievo*, and in this acceptation may be considered as synonymous with Model. See that word.

Sceptre. [Gr. σκηπτρον, a sceptre, or stick, from σκηπτω, to lean upon.] *In archaiology*. The original meaning of the word sceptre is a baton or walking stick;

and thus called among antiquarians *hasta pura*, the pike or staff which is often represented in the hand of divinities or kings. According to Justin, the lance was considered as the sceptre of heroes, who also bore one or the other when appearing in public assemblies. In process of time, the king's sceptre became covered with ornaments in copper, ivory, gold, or silver, and also with symbolical figures. The sceptre borne by the Roman emperors, as it appears on their medals, &c. is surmounted, when these princes are in the consular habit, with a globe topped by an eagle. Proofs of this are discoverable from the time of Augustus.

Phocas is imagined to have been the first who added a cross to his sceptre; and his successors even substituted the former emblem for the latter, bearing ornamented crosses alone. Richard Cœur de Lion held in his right hand a golden sceptre surmounted by a cross, and, in his left, a golden baton, topped by the figure of a dove.

Schools of Art. The amateurs of the arts of design understand by this term certain classes of artists, whose works are all referable to one common origin. The phrase, however, takes at times a more limited meaning, and refers to the followers of one particular master, and thus we say, the *school of Raffaelle*, the *school of Rubens*, &c. In the first and most comprehensive sense, however, the schools of painting may be divided into nine; namely, the *Florentine*, the *Roman*, the *Venetian*, the *Lombard*, the *Flemish*, the *Dutch*, the *German*, the *French*, and the *English*. There are also a variety of schools in the sister arts of Architecture and Sculpture, to which words we beg to refer our readers.

The several manners of imitating nature which have peculiarly characterised different countries, have given rise to the diversity of *schools*. This diversity has existed at all times. The Grecians adopted, recognised, and distinguished these varieties. In painting they at first distinguished two celebrated schools, the *Helladic* and the *Asiatic*. Eupompus, the painter of Sicyon, invented in Greece a new manner; and in honour of him, says Pliny, they divided the Helladic school into two;—namely, the Attic and the Sicyonian.

In architecture, the term has not been so commonly used; though not because that art is wanting in celebrated masters, who have brought up numerous pupils, and have transmitted to them their own style. Palladio, for instance, is the chief of an extensive school. But it should seem that variety of style, in architecture, is less sensible than in the other imitative arts; and it has been even remarked, that many modern architects, whose names stand out from the general list as having acquired a great degree of celebrity, are indebted more to novelty and caprice than to real and abiding invention. There are, at the same time, in architecture, various local manners of building, dependent either on climate, materials, or some other arbitrary cause, which, in the commencement of the art, have become, almost insensibly, the principles of its development, and may consequently be ranged into schools. Thus we speak of the *Florentine* school, at the head of which may be placed Bruneleschi and Michel Angiolo; the *Venetian*, which is led by Palladio and Scamozzi, &c. But we have treated fully upon the subject under the head of Architecture.

We shall now proceed to say a few words respecting the several schools of painting.

The *Florentine School*. For many ages the city of Florence has been one of the principal seats of the fine arts; and has produced, in all their various branches, a number of justly eminent professors. It is requisite to distinguish the elder from the more modern Florentine school. Ever since the thirteenth century Florence has obtained high reputation as the seat of art. Its senate introduced several artists from Greece, by whom the style and taste of the students were formed; and hence arose the elder Florentine school, at the head of which stands Cimabue, and which may be said to comprise all the painters of Italy worthy notice until the appearance of Lionardo da Vinci, with whom commenced the modern Florentine school, and who was followed by Michel Angiolo, and a list of other great masters. The leading principles of the Florentine school of painting may be denominated grandeur, dignity, and force. Details respecting it may be found in *Memoriale di molte Statue e Pitture, che sono nella Città de Firenze*, di Franc. Albertino, Florence, 1510, 4to. *Le Bellezze della Città di Firenze*, di M. F. Bocchi, Florence, 1591, 8vo., and 1677, 8vo. *Ristretto delle Cose più notabili in Pittura, della Città di Firenze*, da Jac. Carlieri, Florence, 1689, and 1757, 12mo. and other similar works.

The *Roman School* is, perhaps, the most important of any, a circumstance which may fairly be attributed to that city having been so rich in the productions of ancient

Grecian art. It was the intense study of these inestimable relics of antiquity that formed the groundwork of the Roman school of painting, although in its progress it was mixed up a good deal both with the Florentine and Venetian schools. Raffaelle, for instance, the greatest name belonging to the Roman school, and perhaps to the art altogether, evidently was indebted, and that largely, for the style of his grander works, to the stupendous genius of Michel Angiolo. To this school, however, we may justly attribute the truest principles and the finest examples of drawing, as well as of that scrupulous correctness which, nevertheless, was quite consistent with vigour and with beauty. Its followers were also eminent for their knowledge in the department of drapery, which knowledge they generally displayed in adopting ample and flowing robes and vestments, as may be observed in the matchless cartoons which form the chief ornament of Hampton Court. On the other hand, one must not seek, in this school, for any very superior exhibition of colouring: indeed, its artists seem to have been too intent on other branches of art, such as we have mentioned—on majesty, composition, and striking effects, to regard with any close attention the varieties and splendours of colour.

The works to be consulted on the history of the Roman school (which comprised, besides Raffaelle, Giulio Romano, the Zuccheri, Romanelli, Gaspar Poussin, Carlo Maratti, &c.) are chiefly the different Discourses pronounced at the Academy of Painting in that town, and the Treatises composed for it. The following are among the principal of these:—*Trattato della Nobilita della Pittura composto ad istanza della venerabil Compagnia di San-Luca, e della nobil Academia della Pittura di Roma*, da Romano ALBERTI, 1581, 4to. *Academie diverse fatte nel Campidoglio di Roma, in onore della Pittura, della Scultura, e dell' Architettura, con le Orazione recitate de vari Prelati e Amatori del Disegno*, Rome, 1696, 1727, 4 vols. 4to. *Le Pompe dell' Academia del Disegno, Orazione di* Giamb. ZAPPI, *recitata nell' Academia di S. Luca, per l'anno* 1702, Rome, 4to. *Le Corone del Merito distribuite sul Campidoglio, Oraz. di* Lud. SERGARDI, *recitata nell' Acad. di S. Luca*, Rome, 1703, 4to. *Le Buoni Arti sempre più gloriose sul Campidoglio, Oraz. detta nell' Academia di S. Luca*, da Annib. ALBANI, Card. Rome, 1704, 4to. *Excellenza della tre nobili Arti, dimostrata nel Campidoglio dell' Academia di S. Luca, per l'anno* 1729, Rome, 4to. *Delle Arti del Disegno, Oraz. di* Gull. Cesare della SOMAGLIA, *detta per la solenne distribuzione de' premi in Campidoglio, il di* 19 *di Maggio*, 1775, Rome, 4to.

The *Venetian School* presents a great variety, whether we view it relatively to the Florentine or the Roman. Destitute of the examples which the elder Florentine school presented to its later offspring, and also of the far more brilliant advantages possessed by the followers of the Roman school, the Venetian artists applied themselves ardently to the contemplation of nature, and seized upon a source of fascination which had been in a great measure disregarded by their predecessors, namely —*colour*. Here start up to our view the most exquisite and brilliant arrangements of tints; and the delighted fancy of the connoisseur revels among the productions of the great prince of this department of art, Titian. To this exalted master, artists of other schools have, we know, been opposed. Both Rubens and Van Dyck have partisans, who claim for each the title of chief colourist: but, in our opinion, however highly we are disposed to estimate the talents of those extraordinary men, we cannot consent to award either the preeminence. Rubens is more meretricious and less true, and Van Dyck, admirable as he is, seems inferior both in variety and richness. Tintoret, Paul Veronese, Giorgione, Sebastian del Piombo, &c. adorn with their illustrious names the Venetian school of painting; and the performances of all are more or less imbued with its peculiar characteristics; namely, vivacity and truth of colour, perfect distribution of light and shade, boldness of touch, and correct eye for nature. They sought out those scenes in landscape, as well as other subjects, wherein the contrasts, the assimilations, or combinations of colour presented the opportunity of exhibiting their greatest fascination. It should be remarked, however, that one explanation of this predominating excellence in the Venetian school may be afforded by the circumstance of the Florentine and Roman artists painting chiefly in fresco and water colours, whilst Titian and his celebrated brethren preferred the use of oils. The portraits of Titian, too, which are numerous, led him to acquire great skill and display of colouring, since he was constrained to be correct and glowing in his carnations, draperies, &c.

We find an abridged history of the Venetian school of painting, as well as an account of the principal works thereof, in a book entitled *Descrizione di tutte le publiche Pitture della Città di Venezia edisole*

circonvicine, Venice, 1733, 8vo. The following may also be consulted:—*Le Riche Minere della Pittura Veneziana*, Venice, 1664, 1674, 12mo. (An enlarged edition appeared in 1730, in 8vo.) *Il gran Teatro di Venezia, ovvero Raccolta delle principali veduti e Pitture, che in essa si contengono*, 2 vols. folio. *Varie Pitture a Fresco de' principali Maestri Veneziana, di* Ant. Mar. ZANETTI, Venice, 1760, folio. *Della Pittura Veneziana, e delle Opere publiche de Veneziani Maestri*, Venice, 1771, 8vo. *Raccolta di cento e Dodici quadri rappres. Istorie sacre, dipinte da' più celebri Pittori della Scuola Veneziana*, 1772, fol. &c. &c.

The *Lombard School*, sometimes denominated the *Bolognese*, or *Eclectic* (Bologna having been its principal seat), was established by the Caracci, and the reader is referred to our article on PAINTING for the sonnet from the pen of one of those eminent masters, in which the principles of their school are developed. It was an attempt to combine and harmonize all the beauties of the different styles which had preceded it; but, although the idea was comprehensive and fine, and manifested uncommon grasp and power in the minds of its suggestors, its unfixed, heterogeneous nature prevented it from holding together, and its avowed followers soon separated, each taking that particular path to which his individual genius appeared to impel him. It is common to rank among the Bolognese artists Corregio, Domenichino, Guido, Lanfranco, Caravaggio, Primaticcio, Schidone, Zampieri, &c. of whom Domenichino may be said to have endeavoured most zealously to pursue the plan of the founders of his school.

The following works will introduce the student more particularly to the several masters of the Lombard school and their performances.—*Felsina Pittrice ovvero Vite de' Pittore Bolognesi, di* Carl. Ces. MALVASIA, Bol. 1678, 2 vols. 4to. with prints. *Osservazioni sopra la Felsina Pittrice*, da Vinc. VITTORIA, Rome, 1679, 8vo., and 1703, 8vo. *Lettere in defesa del Malvasia*, par Gianp. ZANOTTI, Bol. 1705, 8vo. *Vite dei Pittori Bolognesi non descritte nella Felsina pittrice*, Rome, 1769, 4to. *Il Passagiere desingannato*, Bol. 1676, 12mo., 1732, 8vo. *Descrizione delle Pitture di Bologna*, da Giamb. ZANOTTI, Bol. 1686 and 1766, 12mo. *Histoire de l'Académie appellée l'Institut des Sciences et des Arts, établi à Bologne en* 1712, par M. LIMIERS, Amst. 1723, 8vo. *Dell' Origine e Progressi della Pittura, Scultura, ed Architettura di Bologna*, da Aless. MACHIAVELLI, 1736, 4to. *Storia dell' Academia Clementina di Bologna*, da Giamp. ZANOTTI, Bol. 1736-39, 2 vols. 4to. with prints. To these we may add the third vol. of the work entitled:—*Disinganno delle principale Notizie ed Erudizioni dell' Arti di Disegno*, da Lud. DAVID, Rome, 1670, 3 vols. 8vo.

The *German School* may be said to have originated with Albert Durer, although he neither reared scholars nor was imitated by the German artists of that or the succeeding century. The indiscriminate use of the words genius and talent has, perhaps, no where caused more confusion than in the classification of artists. Albert Durer has been characterised as a man of great ingenuity without being a genius. "He studied, and, as far as his penetration reached, established certain proportions of the human frame; but he did not invent a style. Every work of his is a proof that he wanted the power of imitation, of concluding from what he saw to what he did not see, that he copied rather than selected the forms which surrounded him, without remorse tacking deformity and meagreness to fulness, and sometimes to beauty."

Besides Durer, we may reckon in the German school, or it would be, perhaps, more correct to say, among the German artists, Lucas of Leyden, Marc Antonio (the engraver of Raffaelle), Holbein, Netscher, Mengs, &c. Lives and accounts of these men are to be found in most of the Biographical Dictionaries and Cyclopædias, both foreign and English.

The *Flemish School* ordinarily comprises all the celebrated painters and sculptors of the Low Countries, including Spaniards and Austrians. These countries, more particularly Brabant and Flanders, were long the chief seats of industry and riches, and consequently of the arts springing therefrom. We may say, speaking generally, that this school carried to the highest point of perfection that imitation of nature which is contented with drawing from her most ordinary and uninviting moods, and takes no pains whatever to select or improve. The Flemish artists were also gifted with an abundant taste for character of the lower and more familiar description, and with great apprehension of the humorous. The name of Teniers must be, of course, well known to every admirer of art; and he is at the head of a long list of names eminent in a similar walk. Of Rubens we have already spoken in our article on PAINTING. Van Dyck, the prince of portrait painters, also belonged to this school, and among its other illustrious ornaments we may

particularize Steenwick, Spranger, Snyders, Neefs, &c. The Flemish school is likewise extremely famous for its skill in colouring, and, as has been before observed, authorities have varied as to the palm of excellence in that particular between it and the Venetian school.

The authors to be referred to hereon are: —*Vies des Peintres Flamands avec des Portraits gravés en Taille-Douce, une Indication de leurs principaux Ouvrages, et des Réflexions sur leurs différentes Manières*, par Jean Bapt. DESCAMP, Paris, 1753, 4 vols. 8vo. *Voyage Pittoresque des principales Villes de Flandre et du Brabant*, Paris, 1768, 8vo. In the 4th vol. of *Œuvres diverses de* DE PILES, we find details respecting several pictures of Rubens; a dissertation on the works of other famous masters compared with those of Rubens; and a biography of this last mentioned master.

The *Dutch School* is not materially distinguished from the preceding; but since it has obtained a separate notice in many of the enumerations, we afford it one also here. The Dutch painters seem to have carried to a still greater extent than the Flemish the principle of taking Nature as they found her, without any regard to selection or embellishment. They made choice of the lowest of subjects: and hence we so frequently find the scenes of their pictures laid in taverns, workshops, or watchhouses. They were very fond of representing the noisy and drunken revels of villagers; and their success in this walk is unquestionably surprising. Their paintings are crowded with figures, just as they happen to come. Their heads are unintellectual, ugly, and vulgar; but at the same time characteristic and various, and often grotesque. They held not back their hand, whatever the nature of the object which might seem incidental to such scenes, and the postures and occupations of many of their figures are consequently quite revolting. This kind of taste must be admitted to be execrable; and yet the uncommon, the almost supernatural reality of the representation goes a great way towards redeeming it. Hagedorn was so struck with this, that he denominated this school—the "*school of truth.*"

These artists almost all challenge the praise of extreme neatness of execution and beautiful finish. They succeed, above all, in producing piquant results of *chiaro-scuro*, such as those of a strong light in a small enclosed space, effects of torchlight, or of the fire of a forge, &c. They have likewise been considered eminent in the representation of perspective, of sky, of marine subjects, fruits, animals, &c. as well as the lesser kind of portraits, and, in short, of all that depends chiefly on a correct eye and a delicate handling.

It must never be forgotten, in speaking and thinking of the Dutch school, that at its head stands one of the mightiest names in the art, whether ancient or modern; we allude to Rembrandt Van Rhyn. We have already (see PAINTING) made some allusion to this extraordinary painter, and have little here to add. A thoughtful observation of his pictures inclines us sometimes to place him at the very summit of his art, so powerful is the impression made by his works on the imagination and feelings. A memorable instance of this occurs in the case of a little cabinet picture by him in the Dulwich gallery, the subject of which is *Jacob's Dream.* Here, in spite of the vulgar appearance of Jacob himself (who looks very much like an old Jew clothesman), and of the perfectly nondescript figures of the "angels ascending and descending the ladder," an effect is produced almost indescribable, and which, once witnessed, can never be forgotten. The dark, heavy sky and landscape, which send their loneliness into the very heart of the spectator;—the radiant column which the grand fancy of the artist has substituted for any resemblance of a ladder; the sleeping figure stretched out below, and but half descried in the gloom; and the undefined, muffled, shapeless phantoms with outspread wings hovering upon the pillar of light,—form unitedly a resistless appeal to the inmost region of the imagination. The picture hangs on one's remembrance like a vivid dream: or rather like what the exalted painter meant, a sort of glimpse into the shadowy precincts of futurity. We may also affix honourable mention to the names of De Leide, Heemskirk, Polembourg, Wouvermans, Vandervelde, Gerard Dow, Mieris, &c.

Besides the works cited in speaking of the Flemish school, the student is here referred to *De Levensbeschryvingen der Nedertantschen Konst-Schildern en Konst-Schilderessen, meten Uytbreyding over de Schilderkonst der Ouden*, door Jac. CAMPO WEYERMANN, Hague, 1729, 3 vols. 4to. with prints.

The *French School* is not very easily characterised, taking it *en masse;* since its elements are various, and it comprises within itself several wholly different styles. Of those artists who may be ranked among its ornaments, some have cultivated the Florentine, some the Roman, some the Ve-

netian manner; whilst others, with a becoming ambition, have trusted to nature and their own genius.

France possessed at a very early period the art of painting on glass, as well as that of miniature; and in both these departments Italy herself stands under obligations to the *grande nation.* (See PAINTING). The oldest of the French painters, however, who left a reputation behind him was Jean Cousin, who, although chiefly devoted to paintings on glass, yet exercised his talents upon canvass also. He likewise practised sculpture. He was correct but inelegant in his drawing.

The three greatest names in French art are Claude Lorraine, Nicholas Poussin, and Anthony Watteau, and the latter alone can fairly be classed in the French school, as the two former practised in Italy, where their style was altogether formed. Of Watteau it is difficult to speak too highly. He appears to the writer of this article to have been one of the most delightful artists that ever set brush to canvass. He is the painter of refined life in its hours of repose and enjoyment. His figures are all true gentlefolks without the slightest parade or affectation. His fancy seems to have dwelt eternally among those scenes which embellish and throw a grace over existence. A ball or concert under the umbrageous trees, or a lady singing while her cavalier, stretched at her feet, accompanies her on some musical instrument, are the subjects he loves to illustrate. Watteau's landscapes are not good; indeed, his spirit seems to have been so well tuned, that he required nothing more than a green turf and a few trees to become moved to elegant mirthfulness. A house (generally of handsome dimensions) is commonly introduced in the background, to indicate that a few minutes would suffice to put the ladies beneath its comfortable roof, if the dew fell, or an overhanging cloud discharged its moisture; and, on the whole, the spectator feels that quiet happy sensation almost always excited by the contemplation of "becoming mirth."

Le Brun and Le Sueur have been already noticed in the course of our article on Painting, and we may particularize, in addition, Blanchard, Vouet, Du Fresnoy, Bourdon, Mignard, Noel, and Anthony Coypel, &c. M. Millin gives to an artist of the name of Vien the praise of having regenerated the taste of the French school, and spread among his pupils that admiration of the antique which they have turned to such good account in their own works. M. David, a French painter of the present day, has acquired great reputation in the department of history. The French Academy of Painting, like our Royal Academy, have annual exhibitions in an apartment of the Louvre.

The following observations are extracted from "*Lettres on the Fine Arts,*" by Henry Milton, Esq. and although some allowance must be made for national prejudice, we are of opinion that they convey a pretty just estimate of the present state of the art among our continental neighbours.

"Of two very large productions from the pencil of the "great" Baron David, one represents Brutus just having entered his dwelling, after the condemnation of his sons;—the other, the Horatii, swearing to their father that they will return victorious, or perish on the field. They are both, as you may imagine from their subjects, pictures of the very highest pretensions.

"In composition, colouring, and expression, I think it is hardly possible for any thing to be more contemptible. They are caricatures of all the faults of Poussin; but unredeemed by the smallest portion of the energy, pathos, and sublimity of that impressive artist. Amongst Rubens's rich freedom, the stiff unmeaning stonework of David looks like the cut yew trees of a Brentford villa, transplanted into a region of luxuriant oaks.

"When we parted in London, you requested me to give you some account of the present state of the art in France. I am little qualified to do so; as it is difficult, whilst surrounded by a profusion of noble works, to examine with attention what are so decidedly inferior. Added to this, many of the paintings on which the French most pride themselves are at present not visible. The subjects they represent being the victories of Buonaparte, the government has deemed it expedient to cover them with green cloth. If their merits correspond with their size, they must be the finest pictures in the world.

"In addition to the works of David which I have just mentioned, I have seen two or three of his portraits. They are splendid paintings; and he is highly skilled in all the mechanical part of his profession. His faces have that strong appearance of individual expression, which inclines you, without knowing the original, to pronounce them to be likenesses. But his portraits are no more to be compared to those by Laurence, than the well looking ladies and gentlemen of Sir Peter Lely to

the breathing and intelligent forms of Vandyck. Indeed, I could mention several other English artists greatly his superiors in portrait; and as for history, I may save myself the trouble of comparison, by asserting, that to me they appear absolutely devoid of any merit, except correctness of design.

"In the lofty style of historic painting, of which he and his school arrogate to themselves the exclusive possession, the dramatic management of the subject is the essential attribute. In none of their compositions, with which the prints have made us familiar, can a single instance be shown, in which the subject is treated with grace and dignity; or in which nature is followed judiciously, and without affectation.—Not a single instance can be adduced, in which a fine idea is simply and felicitously expressed.

"The largest collection of modern French paintings which I have yet seen, are the portraits of the marshals, in the hall of the Tuilleries. I particularly examined these pictures; thinking from the consequence of the persons painted,—at least at the time when they were painted,—and from the destination of the pictures, that they would be the careful productions of the best artists. None of them can be considered as good pictures:—none of them deserve a higher character than I have given of those by David."

An abridged history of the old French academy of painting may be found in the *Description de l'Académie Royale de Peinture et de Sculpture*, by M. Guerin, Paris, 1715, 8vo.; and in the 1st vol. of the *Description de Paris*, by Piganiol de la Force. Observations biographical and critical on the French painters may likewise be met with in the following works:—*Entretiens par* Felibien, *sur les Vies et les Ouvrages des plus excellens Peintres; L'Abrégé de la Vie des Pientres, avec des Réflexions sur leurs Ouvrages*, par Roger de Piles; *Les Vies des premiers Peintres du Roi, depuis Charles Le Brun, jusqu'à François Le Moine*, par Bernard L'Epicier;—*Abrégé de la Vie des plus fameux Peintres*, par D'Argensville, &c. Respecting the French academy founded by Louis XIV. at Rome, the reader may consult the *Saggio sopra l'Academia di Francia che è in Roma*, by Algarotti, Livorno, 1763, 8vo. translated into French by Pingeron, Paris, 1769, 12mo.: and on the actual existing state of the art in France the little work will be found useful which M. Neergaard has published under the title of *Lettres sur la Situation actuelle des Beaux Arts en France*, Paris, 1801, 8vo. as well as the various catalogues of and criticisms on their recent exhibitions.

It now remains that we take a brief notice of the school of painting which has sprung up in our own country. This, like the French school, is not easily to be specified. Its range is extensive; but it may be said to shine with the greatest effect in the walk of portrait. Millin, who seems to take every opportunity of doing us justice, gives the English school of artists praise for "judicious composition, great excellence in drawing the human form, elevated ideas, and truth of expression. Several masters of this school," he goes on to observe, "unite fine colouring to the more exalted parts of the art, and it may be remarked that their colours, less brilliant than those of the Flemings or Venetians, resemble greatly those of the Lombard school."

At the head of the English school of painting may be placed the names of Hogarth, Reynolds, and Wilson; and the impetus given by them to the art has since produced a number of worthy successors. At the present day, we are happy to say that the historical department is cultivated with a greater chance of success than ever. We shall perhaps be excused for particularizing a picture lately exhibited by Mr. Etty, the subject of which is allegorical, and represents a combat between two warriors, with a female figure pleading for the vanquished. This picture seems to us, both in respect of composition, expression, and colouring, better calculated than any we have seen since the days of Sir Joshua to elevate and ennoble the school in which it has been painted.

We shall now proceed to extract a few passages from the "Epochs of the Arts," by Mr. Hoare, from which the reader will gather a more complete view of the recent and indeed present state of British art than from any other source with which we are acquainted.

"The annual returns of numerous exhibitions of painting in different parts of the kingdom, though they may occasionally be without some particular specimens of superior talents, unquestionably demonstrate the average state of the arts amongst us;—that average state, which, it has been asserted, must correspond, in a very great measure, with the general state of the public feeling with regard to the arts.

"Let us first look at the exhibition at Somerset House: what does it still exhibit? A splendid mass of Portraiture, such as has rarely, if ever, been surpassed in any

school of any nation. To this point, the actual degree of knowledge and esteem of painting in the public, and the skill of the artist, equally concur. The slowly awakening taste of the nation has scarcely produced any increase of works in the higher classes of art. In familiar history, the scenery of humble and domestic life, the nearest allied to portrait painting, extraordinary efforts have deservedly attracted a considerable portion of public attention. The number of historical pictures in other classes continues in the same inferior proportion as ever, to that of portraits. The nation views with complacence, and without farther ambition, an excellence of no inconsiderable degree, widely diffused in the latter branch; and its taste may be regarded as so far advanced, as it no longer imagines superior powers to exist in every work of foreign schools. We reason with justice from a lately imported specimen (in engraving) of the most favourite portraiture of France, that we are as yet in no dread of rivalry in that province.

"Our exhibitions of *water-coloured* drawings have displayed a uniformity of merit in landscape; and some examples have here also appeared in subjects of familiar history, which aided, perhaps, by the comparatively easy method of execution, have presented instances of graphic expression, seldom seen except in works of the highest kind. To this point also, the state of the art appears to be within the compass of the actual degree of public knowledge.

"The British Institution, having provided commodious rooms, where the pictures of living artists might be exhibited, has annually admitted for sale, whatever works of competent merit have been sent thither. It assembles, also, an annual collection of the works of Italian and other masters, which students are invited to copy: a judicious and liberal arrangement, tending to relieve one of the greatest deficiencies noted in the Royal Academy, and acceptable to the young proficients, in proportion to the exceeding difficulty of procuring access (for the purposes of study) to many valuable collections, with which the metropolis abounds. Not long after its establishment, it announced the offer of pecuniary rewards for the best compositions in distinct classes; and in proportion as its funds increased, it has augmented its rewards. It commenced also its gallery of ancient masters. Finally, redeeming the neglect of the age, and offering to the state an example of patronage, the directors purchased of a great historical painter one of his best and latest works, at the splendid price of 3,000 guineas, purposing at the same time that it shall form the commencement of a gallery of the *English school*. After the long interval, which had succeeded to the labours of Barry, at the Society of Arts, this purchase made by the British Institution is to be hailed as the first example of public patronage shown to painting in England.

"The institution will ever merit the gratitude of English artists for the weight it has added to the benevolent efforts of individuals, in favour of our native school. It has opened the doors of opulence to the admission of English pictures, and reconciled the patrons of foreign talents to the pretensions of our own. Nor is it a matter of small moment, that, if ever the government should assume to itself the patronage of the higher provinces of painting, its views would be found so fully seconded by the British Institution, as to produce nearly a complete arrangement of the powers of the state in regard to painting. This respectable institution, even if it should not attain a higher end, cannot fail to create a body of artists, capable of filling every subordinate channel with adequate excellence.

"The exhibitions established in the provincial cities, have been in many instances highly creditable to individual exertion, and may not a little tend to mature the taste of the public; but they have been hitherto attended with very various results. In some instances they have been greatly successful; in others far less prosperous.—Little information is to be gathered from them respecting the present state of the public knowledge or taste."

In most of the schools of art we may trace some predisposing cause for the peculiarity of style and genius by which they are characterised. Thus the Roman school deduced its manner from the admirable education afforded to its earliest practisers and to the *chefs-d'œuvre* of ancient art found among the ruinous parts of the "eternal city." With respect to the Venetian school, the magnificence which was imparted to Venice by commerce with the East, together with their frequent fêtes and masquerades, and the splendid vestments of their nobles, produced that richness and warmth of colour by which its works are distinguished: while the Dutch school, on the contrary, owes to the humble and unpretending life of its artists, who were ordinarily the frequenters of taverns and workshops, that lowliness of style and want of selection as to subject which require all the transcendent talent for cor-

rectness and spirit possessed by its followers to lift it above reprobation.

SCIAGRAPHY. [Gr. σκιαγραφία, from σκιά, a shadow, and γράφω, to describe.] *In painting and architecture.* This word generally signified, among the ancients, painting in shades; and the Greeks sometimes employed it in the same sense to which we now apply the term *chiaroscuro.* Apollodorus was the first of the Greek painters who knew how to beat out his colours and to express the privation of colour by shade. His success obtained him the appellation of *sciographe,* that is to say, painter of shadow. Hesychius informs us of this fact, which appears to be of some importance with regard to the history of ancient art.

In architecture, sciagraphy is the representation in profile, or the section in perspective, of the interior parts of a building. It is through mistake that this word has been often spelt *sciography.*

SCIENCE. [*scientia,* Lat. from *scio,* to know.] *In all the arts.* The cultivation of the fine arts, generally speaking, requires too entire an application of the time and attention of the artist to enable him to make any deep research into the principles of those points of knowledge, the acquirement of which would nevertheless conduce greatly to his profit. Certain writers have exaggerated absurdly on this topic, alarming the fancy of the student by representing as necessary the acquirement of such a mass of information as he must despair of ever obtaining. For ourselves, we are inclined to say, with Reynolds, that a painter should possess more knowledge than he can obtain either from his palette or from his model, whether he studies nature or some production of art; inasmuch as it would be impossible for a grossly ignorant man to become a great artist. The painter, as well as the poet, ought to gain a sufficient insight into that part of the science of philosophy which relates to the passions and affections of men, to the end that he might be enabled to display them judiciously; and we have already observed that he should have some acquaintance, and that not slight, with the science of anatomy, as well as those of perspective, optics, &c. But let not the young aspirant after fame be daunted. What is required of him is within his reach. We do not expect or seek that he should be as profoundly skilled in these various studies as those who follow them not as a means but as an end. All that is necessary (but this he must do) is to husband his time, to apply closely and undeviatingly to his art and its auxiliary points of knowledge, and if he has chosen it wisely, he will soon find that excellence is by no means placed beyond his grasp.

SCIENTIFIC. [from *science.*] *In the arts of construction.* This term is principally applied to the skilful, solid, and proportionate disposition of the various parts of a building.

SCIPIO. [Lat. a walkingstick.] *In archaiology.* Name given by the Romans to a staff or sceptre of ivory, which was the emblem of the consular dignity and power. In the times of the republic, this baton was single and unornamented. Under the emperors, and principally under those of Constantinople, the *scipio* was surmounted by an eagle, and sometimes by a bust representing the reigning emperor. It became in the end a distinctive ensign of triumphers. The *imperator* never bore it. We see it in several dipticks in the hand of the consuls.

SCIROPHORION. [σκιροφόριον, from σκίρα, an Athenian festival.] *In archaiology.* See PARASOL.

SCORPION. [σκορπυς, perhaps from σκορπιόω, to scatter, *subin.* poison.] *In archaiology.* This insect is represented on several ancient monuments. It is generally extremely ill drawn, and its traits are rudely indicated upon a cornelian of the Royal Cabinet of Paris. It would not be easily recognised if Natter, in his *Méthode de graver sur Pierres fines,* pl. 3, No. 1, had not published a figure somewhat similar but better executed. When found upon medals, the scorpion is considered as symbolical of Africa.

SCORPIUS. [Lat.] *In archaiology.* See CROBYLUS.

SCOTIA. [Gr. σκοτία, darkness.] *In architecture.* A hollow moulding used in bases to capitals.

SCRINIUM. [Lat. from *secerno,* to lay aside.] *In archaiology.* Name of a little box or chest, usually of a circular form, in which the ancients deposited their volumes or rolls of manuscripts, most generally when they travelled about.

SCULPTOR. [Lat. from *sculpo,* to carve.] Engraving is occasionally called working *en creux,* sculpture working *in rilievo:* yet in its most comprehensive range the word sculpture has been applied to both these.

The studies necessary for the young sculptor, towards the attainment of his art, are so similar to those which form the painter (with the obvious exceptions arising from the difference of materials employed in the two arts), that very little remains here to be enlarged on, under the

head of studies. The principal acquisitions to which the student must direct his endeavours are, a knowledge of composition, form (including anatomy), and expression; to which, as in painting, must be added the difficult study of grace.

The method of study most recommended to young sculptors is, to begin with copying, and to end with rivalling, the forms of the Greek statues.

——" Vos exemplaria Græca
Nocturnâ versate manu, versate diurnâ;"

says Du Fresnoy: nor can it be questioned that the sculptors are, generally speaking, the safest guides to the study of nature. But it should not pass unnoticed, that although the forms of the Greek sculpture are, in general, not only more beautiful, but more appropriately so than any other; yet in some instances they have been surpassed by modern sculptors, as in the forms of infants by Flamingo.

The method of execution in the Greek statues and other works of sculpture, seems to have been extremely different from that which is generally in use among modern artists. In the ancient statues, we frequently find striking proofs of the freedom and boldness that accompanied each stroke of the chisel, and which resulted from the artist being perfectly sure of the accuracy of the method which he pursued. Even in the most minute parts of the figure, no indication of timorousness or diffidence appears: nothing that can induce us to believe, that the artist feared he might have occasion to correct his strokes. It is difficult to find, even in the second-rate productions of the Grecian artists, any marks of a false or a random touch. This firmness and precision of the Grecian chisel were certainly derived from a more determined and perfect set of rules than those of which we are masters.

Besides studying, therefore, in the productions of the Grecian masters, their choice and expression of select nature, whether beautiful, sublime, or graceful, together with that sedate grandeur and simplicity which pervade all their works, the artist will do well to investigate the manual and mechanical part of their operations, as they may lead to the perception of their mode of progress.

As soon as the artist has rendered himself familiarly acquainted with the beauties of the Grecian statues, and formed his taste on the admirable models they exhibit, he may then proceed with advantage and assurance to the imitation of nature. The ideas he has already formed of the perfection of nature, by observing her dispersed beauties combined and collected in the composition of the ancient artists, will enable him to acquire with facility, and to employ with advantage, the detached and partial ideas of beauty which will be exhibited to his view in a survey of nature, in her actual state. When he discovers these partial beauties, he will be capable of combining them with those perfect forms of beauty with which he is already acquainted. In a word, by having always present to his mind the noble models already mentioned, he will form an accurate judgment of the powers of his art, and will draw rules from his own mind.

There are, however, two ways of imitating nature. In the one, a single object occupies the artist, who endeavours to represent it with precision and truth; in the other, certain lines and features are taken from a variety of objects, and combined and blended into one regular whole. All kinds of copies belong to the first kind of imitation; and productions of this sort must necessarily be executed in a confined and servile manner, with high finishing, and little or no invention. But the second kind of imitation leads directly to the investigation and discovery of true beauty, of that beauty whose perfect idea is only to be found within the mind.

"The sculptor (says Sir Joshua Reynolds) may be safely allowed to practise every means within the power of his art to produce a deception, provided this practice does not interfere with or destroy higher excellencies; on these conditions he will be forced, however loth, to acknowledge that the boundaries of his art have long been fixed, and that all endeavours will be vain that hope to pass beyond the best works which remain of ancient sculpture.

"Imitation is the means, and not the end, of art; it is employed by the sculptor as the language by which his ideas are presented to the mind of the spectator. Poetry and elocution of every sort make use of signs, but those signs are arbitrary and conventional. The sculptor employs the representation of the thing itself; but still as a means to a higher end,—as a gradual ascent always advancing towards faultless form and perfect beauty. It may be thought at the first view, that even this form, however perfectly represented, is to be valued and take its rank only for the sake of a still higher object, that of conveying sentiment and character, as they are exhibited by attitude, and expression of the passions. But we are sure from experience, that the beauty of form alone,

without the assistance of any other quality, makes of itself a great work, and justly claims our esteem and admiration. As a proof of the high value we set on the mere excellence of form, we may produce the greatest part of the works of Michel Angiolo, both in painting and sculpture; as well as most of the antique statues, which are justly esteemed in a very high degree, though no very marked or striking character or expression of any kind is represented.

"But, as a stronger instance that this excellence alone inspires sentiment, what artist ever looked at the Torso without feeling a warmth of enthusiasm, as from the highest efforts of poetry? From whence does this proceed? What is there in this fragment that produces this effect, but the perfection of this science of abstract form?

"A mind elevated to the contemplation of excellence perceives in this defaced and shattered fragment, *disjecta membra poetæ*, the traces of superlative genius, the relics of a work on which succeeding ages can only gaze with inadequate admiration.

"It may be said that this pleasure is reserved only to those who have spent their whole life in the study and contemplation of this art; but the truth is, that all would feel its effects, if they could divest themselves of the expectation of *deception*, and look only for what it really is, a *partial* representation of nature. The only impediment of their judgment must then proceed from their being uncertain to what rank, or rather kind of excellence, it aspires; and to what sort of approbation it has a right. This state of darkness is, without doubt, irksome to every mind; but by attention to works of this kind the knowledge of what is aimed at comes of itself, without being taught, and almost without being perceived.

"The sculptor's art is limited in comparison of others, but it has its variety and intricacy within its proper bounds. Its essence is correctness: and when to correct and perfect form is added the ornament of grace, dignity of character, and appropriate expression, as in the Apollo, the Venus, the Laocoon, the Moses of Michel Angiolo, and many others, this art may be said to have accomplished its purpose."

According to Pliny, the fiftieth olympiad or the year 600 before the vulgar era, was the epoch of the first Grecian sculptors, and he particularizes Dipœnus and Scyllis. These artists were born at Crete, and dwelt at Sicyon; their works were to be found at Argos, at Cleone, and at Ambracia. We may next mention Bathycles, who flourished in the time of Solon.

The arts went on advancing from the reign of Pisistratus until the epoch of the liberty of Athens, the riches of the Samians appearing to have greatly facilitated their progress. Learchus of Rhegium made at Sparta a Jupiter composed of several plates of bronze; Doryclidas, of Laconia, a Themis, which was placed upon the temple of Jupiter at Olympius; his brother Medon, a Minerva armed, for the same temple; Dontas, the combat of Hercules and Achelous—the former protected by Minerva, the latter by Mars; Theocles, Hesperides, both in brass and gold. Bupalus and Anthermus must have flourished in the sixtieth olympiad, since they executed a bust of the poet Hipponax, who lived about that year. Besides these, we discover, relative to that remote date, the names of Damea, Calon of Elea, Laphore, Aristomedon of Argos, &c.

The expulsion of the Pisistratides brought about a new era of Grecian art. After that epoch, and more especially after the battles of Salamines and Platæa, the genius of the Athenians, excited and inflamed by success, spread widely over the whole field of art, pursuing with peculiar aptitude the walk of sculpture. About this period we must rank Ageladas, whom Pliny places, doubtless through mistake, in the eighty-seventh olympiad. This man had the distinguished honour of being the master of Phidias. To the same era belongs the name of Pythagoras of Rhegium, who, according to Pliny, was the first sculptor by whom were expressed the nerves, veins, and arteries of the human body; and who excelled all prior masters in the exhibition of the hair. Simon and Onatas, of Ægina, follow; together with Calamis and Dionysius of Argos, who carved a bronze horse placed at Olympius, and which (says Millin) must have imitated nature capitally, since it attracted the attention of all the *male* horses which passed.

But it was under the government of Pericles that the art of sculpture, above all others, rose to its most eminent degree; and no wonder, since his reign was adorned by the performances of the finest and noblest hand that ever held a chisel. Its possessor was PHIDIAS, at whose illustrious name the masterpieces of ancient art rise in dazzling succession before the mental eye of the amateur. This great artist was an Athenian, son of Charminus, and, as we have already said, pupil of Ageladas of Argos, and of Hippias, whose names

are known only from the circumstance of their having imparted to their highly gifted *élève* the rudiments of his art. The contemporaries of Phidias were Alcaménès, Critias, Hégéas, and Nestoclès, the first mentioned of whom is the only one whose reputation has survived. Diodorus has observed that Phidias flourished at an epoch favourable for the developement of his talent; and it is an interesting fact that the same era was irradiated by the glorious names of Socrates, Plato, and Aristotle, philosophers; Isocrates and his disciples, orators; and the most celebrated generals—such as Miltiades, Themistocles, Aristides, Cimon, &c. Phidias at first applied himself to the sister art of painting; but ultimately abandoned it for sculpture, to the cultivation of which he devoted all the resources of his powerful and original talent. He wrought in bronze, in ivory, and in marble. See the following article.

Alcaménès, already alluded to, was the pupil of Phidias, whom he nobly endeavoured to rival, thereby acquiring in his day great renown. He was born at Athens in the eighty-third olympiad, and worked in bronze and marble, and his productions were numerous. Agarocrites of Paria was another favourite pupil of the mighty master. It is related that these two fellow-students agreed each to make a statue of Venus, as a kind of trial of strength; and the palm was awarded to the former, not so much on account of superior merit as from the circumstance of his being a townsman of his judges, the Athenians, who thus reversed the old saying, that "a prophet is without honour in his own country." Mys was an artist celebrated for his works in silver; this was he who, upon the buckler of the goddess Minerva, represented *in rilievo* the combat of the Centaurs and Lapithæ. Ctesilaus executed Amazonians, in bronze, for the temple of Diana at Ephesus, and his statues were regarded as taking the next rank to those of Polycletes and Phidias. Onatas, son of Mycon, forgotten by Pliny, flourished about the seventy-fifth olympiad, and made several celebrated works, such as the Greek heroes going to combat Hector, &c. Myron, born at Eleutheræ in Bœotia, obtained an act of naturalization in Athens, and hence has been frequently called an Athenian. The greater part of this artist's works, cited by Pliny, are in bronze; one only is mentioned by him in marble. Pausanias however speaks of a figure of Hecate in wood.

Sicyon, celebrated in the annals of ancient art, was the birthplace of Polycletes, one of its brightest ornaments. He was a pupil of Ageladas, and according to Pliny, flourished in the eighty-seventh olympiad (432 years B. C.). This sculptor appears to have been the first who executed figures supporting themselves only upon one leg. He was reproached for giving to all his figures too great an expression of dignity, which was wont to exalt mere mortals into the semblance of gods. The celebrated statue of Doryphorus, frequently designated the CANON (see that word) of Grecian art, and the no less renowned CANEPHORÆ (which refer to) of this great artist are alone sufficient to immortalize his fame. This age possessed also two sculptors of the name of Callon, who have been erroneously confounded together by Winckelmann, whereas the fact is that one was of Ægina, the other of Elis. It may be observed, also, that besides the famous Polycletes of Sicyon, there was another statuary of the same name born at Argos.

The isle of Paros gave birth to Scopas, a sculptor in bronze and marble. Pliny places him likewise in the eighty-seventh olympiad. This artist, assisted by his rivals and imitators, Bryaxis, Timotheus, and Leochares, was employed in ornamenting the sepulchral monument erected to the memory of her husband Mausolus, by Queen Artemesia, and thence called MAUSOLEUM (see that word).

With the reign of Alexander the Great commenced a new era in the history of art, and the *beautiful* or *graceful* style has been said to have superseded the *grand*. This style, invented by Parrhasius in painting, was soon communicated to sculpture.

Praxiteles may be said to have begun the change. This transcendant genius seems to have lived in the one hundred and fourth olympiad, or about 400 years B. C. His birthplace is not known. According to Pliny, Praxiteles was more successful in and acquired greater fame from his works in marble than those in bronze. The reader will find further mention made of him in the next article. Euphranor was both sculptor and painter. See PAINTING. Lysippus, a native of Sicyon, contributed greatly to the progress of sculpture. Pliny places him in the one hundred and fourteenth olympiad. This man was originally a tinker or brazier, but the irrepressible consciousness of genius lifted him out of that humble sphere, and he was fortunate enough in the early part of his career to receive the instructions of the painter Eupompus, who exhorted him to follow Nature alone. Bronze appears to have been the chief substance

employed by Lysippus, and it is by no means certain whether he ever wrought in marble or not. The number of this artist's works is quite remarkable. If we may trust Pliny, they amount to six hundred and ten statues! There can however be little doubt but that he had skilful assistants. He indeed founded a school; and amongst his most accomplished disciples we may instance Euthycrates, his son, who imitated his father's correctness and truth, rather than grace or beauty, of execution. Tisicrates of Sicyon, élève of this latter, adhered more faithfully to the school of Lysippus, and was the author of many beautiful works.—The famous horses which formerly decorated the *Place Carousel* at Paris, but have been since restored to St. Mark's, have been attributed to Lysippus, but on doubtful testimony, and it is as well for the sculptor's fame that the testimony *is* doubtful.

Sculpture, in common with the other arts, declined in Italy with the loss of liberty. The war which had taken place among the successors of Alexander was extremely unfortunate for the arts. They found an asylum at Alexandria, in Syria, and at Pergamus. The Romans sacked Corinth towards the one hundred and forty-fifth olympiad; and the perpetual robberies committed on Greece by that people (See GREECE and ROME) tended much to discourage the higher practice both of painting and sculpture altogether, and led those individuals who still pursued it to Rome itself. Among these, the foremost name is that of Arcesilaus, the friend of Lucius Lucullus, of whom Varro speaks highly, and we must next allude to that of Pasitéles, which latter was likewise an author.

The art of sculpture (which never found any very distinguished followers among the Romans) fell into complete disuse in the middle ages, although ornaments of different kinds, together with rude images, were profusely lavished on the various churches. The revival of painting produced a like resuscitation of the sister art; and amongst the earliest professors who strove to rescue sculpture from its disrespected state appeared Donatello, or (to give him his true name) Donato di Bardi, born at Florence in 1383. There had, indeed, been some efforts made even a century before his time towards the same laudable purpose; and of those engaged therein, we may mention the names of Nicholas Pisano, who was designated by his countrymen *Ritrovatore del buon gusto nella Scultura*, "Restorer of Fine Taste in Sculpture," and his son, Giovanni Pisano, who was one of the best artists of his age, and whose works are numerous at Pisa his country; Angelo and Agostino Sanese, who died about 1340; Andre Ugolino, died 1345; Andre Orcagna, surnamed Bufalmaco, who was an excellent artist, for his time, and died 1389, as did also André Pisani, the author of several good figures in the church of Santa Maria del Fiore at Florence. Michelo Aignani, died in 1400; Jac. della Quercia, in 1418; N. di Banco, in 1421; Luca della Robbia, in 1442. This man possessed the means of overlaying his productions in *terra cotta* with a fine varnish, which circumstance caused them to be much sought for throughout Europe.

Donato was one of the greatest men concerned in the revival of the art of sculpture. It was one of his figures, a bronze statue of St. Mark, that Michel Angiolo is said to have addressed in these emphatic words—"*Marco, per che non mi parli?*" "Mark, why do you not speak to me?" Another remarkable production of his hand is the figure of an old man with his head shaved, to be found at Florence, and called the *Tondu* or bald man. Donato died in 1466, at the advanced age of eighty-three. Amongst his most favourite pupils we may class:—Bertolde, a Florentine; Didier da Settignano, a most promising artist, who died at the early age of twenty-eight; Vellano of Padua; Rossellino; F. Camilliani, and M. Michelozzi. Simon, brother of Donatello, also followed his manner. This artist was summoned to Rome by the Pope Eugenius IV. and made one of the bronze gates of St. Peter's. Prato, Rimini, Florence, and Arezzo possess sundry works of Simon. Benedetto di Majana flourished about 1460. André Pisano, commonly called Pisanello, a pupil of André del Castagno for painting, acquired considerable reputation in sculpture, more particularly distinguishing himself in the execution of medals. We also find, Giovanni Antonio Amadei, died 1470; A. Rosselino, called Gamberelli, 1490; G. Vellano, 1493; A. Abondio, 1520; G. F. Rustichio, 1528; A. Contucci, 1529; A. R. Brioscо, 1532; G. Sanctacroce, 1537; A. Busto, called Bambaja, about 1538; L. Lotto, called Lorenzetto, 1541 (according to Vasari, this was the first restorer of the antique statues); B. Agnolo, 1543; P. Clemente, 1548; G. Campagna and L. Leoni, about 1550; S. Mosca, 1554; A. Begarelli and G. Bandini, called Benedetto, about 1555, with A. Zotto; D. Cattaneo, A. Minganti, and F. Mosca, called Moschino, 1560; A. Berruguieta, 1561;

A. and L. Calamech, 1564. André Verochio is particularly known through the celebrity of his pupils Pierre Perugin and Lionardo da Vinci—of the latter of whom becoming jealous, he quitted painting altogether and attached himself wholly to sculpture. Jean François Rustici, born at Florence about 1470, was an élève of Verochio, and afterwards of Lionardo da Vinci, who taught him the methods of modelling, of carving in marble, and casting in bronze. Rustici was invited to Paris by Francis I. who employed him to work from the model of a horse twice as large as life, and his performance when finished was to have borne a statue of the king himself; but, that prince's death suspended the undertaking. Rustici died at Paris in 1550.

We now proceed to cite the name of Michel Angiolo Buonarotti, one of the very greatest names of modern art, whether regarded as sculptor, painter, or architect. He was born in 1474 and died in 1564, at the advanced age of ninety. The productions of his chisel enriched several of the Italian cities. The beautiful group of *Notre Dame de Pitié* in the basilica of St. Peter's; the colossal statue of Julius II.; the three figures executed for the tomb of that pontiff, the centre one of which is the far famed *Moses;* the *David combating Goliath*; the *Victory* at Florence:—these, among many others, bear abundant evidence of the transcendant skill of the artist. The statue representing Night, upon the tomb of Julian de Medicis, is considered by Keyssler worthy of a parallel with the most admired works of antiquity. Giacomo Tatti, better known under the title of Sansovino (the place where he was born), was architect likewise as well as sculptor (See ARCHITECTURE). This artist made at Rome (at the same time with two other able sculptors) a model of the famous antique group of the Laocoon to cast in bronze. Sansovino's was esteemed the best, on the authority of Raffaelle. The lodge of St. Mark's Place at Venice is the work of the same artist, who placed in niches four bronze statues representing Pallas, Apollo, Mercury, and Peace. One of his celebrated performances (the greater part of which are at Rome and Florence) was a marble statue of Bacchus, lost in the fire at the Grand Duke's palace in 1762: an engraving of it remains in the 3d vol. of the *Musée de Florence*. The *Virgin* in the church of St. Mark, and a figure of St. John Baptist, in that of *Casa Granda*, pass for the *chefs-d'œuvre* of this master. He died at Venice in 1570, eighty-three years old. Baccio Bandinelli, born at Florence in 1487, had for his first master his father, who was a goldsmith, but afterwards received instructions from Rustici. He was a good designer: his manner was learned and striking, and bore some resemblance to that of Michel Angiolo. There is however, in the Pitti Palace, a Bacchus in marble treated in a manner very soft and graceful. To Bandinelli was imputed the heavy charge of his having been seduced by jealousy to destroy the cartoons of Michel Angiolo and of Lionardo da Vinci. It was he who restored, in *terra cotta*, the right arm of the Laocoon, the original having been lost. Skilful in anatomy, he was accused of having been too fond of displaying that knowledge. He died in 1559. Amongst his most renowned pupils were:—P. da Vinci (nephew of Lionardo), died 1570; B. Ammanati, born at Florence in 1511; V. Rossi and J. B. D. Lorenzi, who sculptured, at Florence, at the tomb of Michel Angiolo, a figure of painting, together with the bust of that great artist. Benvenuto Cellini was born at Florence in 1500, and died in 1570. He was painter, goldsmith, and sculptor. He also was summoned to Paris by Francis I. Propertia Rossi is one of the few female names that we meet with among the sculptors of this early date. This interesting woman lays claim to notice in several ways. She studied and well understood the laws of perspective and architecture; nor did the science of music escape her observation. She likewise executed some pretty drawings in pen and ink. Her fame as a sculptor rests principally on a bust of the Count Guido, and upon two angels in marble with which she decorated the façade of the church of St. Petronia. This poor young creature fell a victim to the chagrin arising from a hopeless attachment, in 1530. D. Ricciarelli, called Volterra (the town wherein he was born, about 1509), was the friend and imitator of Michel Angiolo. L. Ricciarelli, his nephew, was likewise a good sculptor. Amongst his other élèves were:—M. Alberti, of Florence; F. da San Vito, of Rome; J. Mazzoni; Pelegrin, of Bologna, called Tibaldi; M. de Sienne; J. P. Rosetti, of Volterra; and D. B. da Cormigliano, of Pistoia. The year 1576 witnessed the death of Gaspard Bacerra. V. Dante, who executed the admired statue of Pope Julius II. died in 1576. G. D. D'Auria, in 1585. A. Fontana, in 1587. P. Scavezzi, in 1590. G. B. Lorenzi, in 1593. G. Della Porta, born at Milan, studied under his

uncle, and cultivated the art of drawing at Geneva from the lessons of Périn del Vaga. In this town he also produced several works in sculpture. At Rome, he restored several antiques, particularly the legs of the Farnese Hercules, the work of the Athenian Glycon. These were esteemed so very beautiful that, although the antique limbs were subsequently found, Michel Angiolo expressed himself against their being restored. The pupils of Della Porta were:—G. Tedesco, who executed small statues, and ornaments in bassorilievo, and B. Torregiani, of Bologna, who died 1596. There were also in his own family several other renowned sculptors, such as the Chevaliers J. B. and T. Della Porta.—F. Ferrucci, surnamed Tadda, lived towards the middle of the sixteenth century.

J. L. Bernini, born at Naples in 1598, was a great architect as well as sculptor. A. Algardi, born at Bologna in 1602, and died in 1654, studied painting at first in the school of Ludovico Caracci, but he afterwards went over to the sister art. He could not however divest himself of his old attachments; and accordingly we find him praised by some and blamed by others for endeavouring to add to the generally understood beauties of sculpture some of the effects previously considered proper to painting. Algardi, however, formed a school, which has produced D. Guidi, J. M. Baratta, J. Peroni, H. Ferrata, G. Brunelli, and C. Mazza, of Bologna. Neither should we omit to state that Algardi likewise occupied himself with engraving. A. Raggi, called the Lombard, was born in 1624 at Vicomorto, on the confines of the Milanese territory, and was successively the pupil of Algardi and of Bernini. His works are numerous at Rome. J. Gonnelli, surnamed the *blind man* of Cambassi (the name of his country in Tuscany), studied successfully under Peter Tacca. Having lost his sight at the early age of twenty, he nevertheless did not abandon the practice of his art, but executed several figures in *terra cotta*, guided by tact alone. It is thus that he made a statue of Cosmo, First Grand Duke of Tuscany. J. B. Tubi saw the light at Rome in 1630. This man appears to have practised chiefly in France, where he was admitted into the Royal Academy in 1663. He made a beautiful copy of the group of the Laocoon, which ornaments one of the apartments in the palace of Trianon. He died at Paris in 1700. C. Rusconi was born at Milan in 1658, where he learnt sculpture, and afterwards proceeded to Rome in order to perfect himself therein. Passionately devoted to the antique, he copied the Antinous, the Rape of Proserpine, the Belvidere Apollo, and twice the Farnese Hercules. The Apollo and one of the latter figures were brought over to this country. The disciples of Rusconi were J. Rusconi and J. B. Maini, both artists of reputation. Angelo Rossi follows, distinguished both as sculptor and drawer. His claim to merit is more particularly founded on the excellence of his bassi rilievi. Not only has he surpassed all his predecessors in that particular walk, but has served as a model to those succeeding him. Rossi did not treat bassi rilievi in the manner of Algardi, who gave a considerable projection to the figures, but observed that demi-relief which certainly approaches very near to the method taken by the ancients. His *basso rilievo* made for the tomb of Alexander VIII. and representing several canonizations made by that pope, is regarded as the most exquisite of all the ornaments of a similar character which adorn the basilica of St. Peter's. He left only one pupil of any note—namely, F. Moderati, of Milan, of whom there are extant two stucco figures of Venus in the palace of the Apostolical Chancery at Rome. G. G. Zumbo, born at Syracuse in 1656, became a sculptor without any other aid than that of his own genius. He used in all his works no other substance than coloured wax, which however he prepared in a peculiar manner. Warin and Le Bel had possessed, it is true, this secret before him: but it was reserved for Zumbo to bring it to perfection. It was this artist who executed for the Grand Duke of Tuscany the famous subject known by the name of *La Corruzione:* this singular composition consists of five figures, of which the first is a man dying, the second a dead corpse, the third a body beginning to decay, the fourth, another in a further stage of decomposition, and the fifth, an appalling spectacle of complete putrefaction! Great horror is inspired by the sight of these objects, owing to the truth and correctness which the artist has thrown into their delineation. He died in France in 1701.

The following names will complete our catalogue of Italian sculptors: of their peculiar merits little is now known.—A. Vittoria, died 1608; A. G. Da Faenza, 1609; F. Cordine, surnamed Franciosino, 1612; O. Censore, 1622; C. Garafaglia, 1630; C. Molli and P. G. Tacca, 1640; F. Mocchi, 1646; F. Agnesini and P. Bacci, about 1650; G. B. Bissoni, 1657;

F. Baratta, 1666; G. B. Volpi, about 1670; M. Maglia, 1678; L. Bernini, 1682; P. P. Nardini, 1684; F. Ferrata, 1686; L. Ottone, about 1691; G. B. Foggini, about 1700; G. Mazzoli, 1725; M. Benzi and G. Mazzo, 1740; P. Mazetti, 1744; A. Corradini, 1752; and, to conclude, F. Schiafino, 1765. The most celebrated name connected in our day with Italian sculpture is that of the lamented Canova. Thorwaldsen, however, although by country a Dane, has been accustomed so long to practise in Italy, that his name may be permitted to stand by the great one just mentioned.

We will now proceed to give a list of those sculptors who have distinguished themselves in the neighbouring kingdom of France. The first of these, respecting whom their countrymen have much cause to boast, is Jean Goujon, of Paris. The date of his birth is unknown, nor are there many authentic circumstances related of his life. He must, nevertheless, be regarded as the restorer of sculpture in France. One of his most considerable performances is the fountain of Nymphs, called the Innocents, began in the reign of Francis I., and completed under that of Henry II., in 1550. Goujon also distinguished himself, not only as an architect, but as an engraver of medals. This artist was slain, as a huguenot, on the bloody festival of St. Bartholomew, 1572. G. Pilon, of Paris, was the author of various works chiefly distributed about the churches of that city, which may be said to possess the principle of grace rather than that of correctness. The town of Douai gave birth to Jean de Bologne, whose works enriched several of the Italian cities. This artist wrought perhaps the most colossal figure that owes its origin to modern art. It is named, we know not why, the *Apennine*, and represents Jupiter Pluvius seated. It is so large, that within the head is a capacious pigeon-house, whilst the hollow of the trunk is occupied by a grotto adorned with shells and *jets d'eau*. John of Bologna wrought with great skill both in marble and bronze, and his naked figures are particularly elegant and graceful. Born in 1524, he died in 1608. Amongst the great body of his pupils we may select P. Francoville; Anzirevelle; Adrian, a Fleming; Moca; A. Susini; F. Della Bella, and Gaspar his brother, both of Florence; and Pierre Tacca. The latter is, perhaps, the most celebrated of any, and was engaged to complete all the works left unfinished at his master's death: among which was the horse which bore the statue of Henry IV. on the Pont Neuf at Paris. He died 1640. S. Guillain was born at Paris in 1581. His father was a sculptor, known by the appellation of Père Cambrai, the place of his birth. This man having taught his son the first rudiments of his art, sent him to perfect himself therein at Rome. The greater part of Guillain's works were destroyed, together with those of other artists, during the Revolution. His style may, however, be perceived from the figures ornamenting the portals of St. Gervas, of the Sorbonne, and of the Feuillans. His followers were Anguier, Hutinot, and Jacques Sarrasin; which latter is well known among French sculptors. He was born at Noyon, but sojourned eighteen years at Rome. The performances of Sarrasin manifest almost throughout a correct taste; but his *chef-d'œuvre* is the group of Caryatides, decorating the grand pavilion of the old Louvre, figures, although colossal, still light and delicate. The group of Romulus and Remus, at Versailles, is likewise worthy of distinction. The school of Sarrasin has produced many excellent artists; among whom we may cite Lerambert, Le Gros, and J. Burette, of Paris, who died 1699. François Anguier, born at Eu in 1604, wrought under Simon Guillain, and under Algardi at Rome. Sentiment appears to have been his strong point, the expression of which was before his time but comparatively little known to the French statuaries. Paris received the ornament of many of this sculptor's works, but the most distinguished was the superb mausoleum of the Duc de Montmorency, beheaded at Toulouse. This monument is to be seen at Moulins, in the church of St. Mary. M. Anguier, brother of the preceding, should be classed rather amongst Italian sculptors, since he was born at Rome, and studied in the school of Algardi. The same may be said of Théodon, who died at Paris about 1680. L. Lerambert, born at Paris in 1614, preceded but a little Peter Paul Puget, painter, architect, and sculptor, born at Marseilles in 1622. Of all the performances of this celebrated artist, the most admired are, a basso rilievo representing the Assumption, at Mantua; the famous statue of Milo, placed in the park at Versailles; the rape of Andromeda by Perseus; and the Alexander before Diogenes, at Versailles; his last work, also, which was left unfinished, and is at Marseilles, has been highly esteemed; its subject is the plague of Milan. Puget died 1694. Gaspard and Balthazar Marsy were born at Cambray, the former 1624,

the latter 1628. They were first educated by their father, and did not go to Paris until 1648, where they received instructions, successively, of Sarrasin, Anguier, and Buyster. These two brothers generally worked in concert; and a favourable idea of their talent may be gained from the group of tritons giving drink to the horses of the sun, in the baths of Apollo at Versailles. E. Le Hongre, born at Paris 1628, studied under Sarrasin. Of all the sculptors employed during the splendid reign of Louis XIV. the one who has left behind him the highest reputation is François Girardon, born in 1630 at Troyes in Champagne, where he acquired the first elements of his art from studying the beautiful sculptures which then adorned his native town. After having passed some time at Rome, he repaired to Paris, where his talents were duly encouraged. The production most contributing to his fame is the mausoleum of Richelieu, in the church of Sorbonne. The equestrian statue of Louis XIV., in the Place Vendome, is another of his finest works. But, after all, the strongest point in the genius of Girardon is his facility and skill in modelling. Among the number of his pupils were Frémin, Nourrisson, Charpentier, Jean Joly of Troyes, and P. Granier, born near Montpellier in 1635. M. Van den Bogaert, surnamed Desjardins, although a Dutchman by birth (born at Breda, 1640), takes rank among French artists, since he established himself when very young at Paris, where he remained. A. Coysevox, of Spanish origin, was born at Lyons in 1640. His statues, portraits, and bassi rilievi, have embellished Paris, Versailles, Sceaux, and Chantilly. He particularly excelled in representing horses; his skill in which respect is abundantly manifested by the two groups of those animals placed at the principal entrance gate of the Tuileries. C. Vanclève was born at Paris in 1645, and studied under François Anguier. A. Flamen, born at St. Omer in 1647, had for his master Gaspard Marsy. P. Francville, a native of Cambray, was remarkable for purity of taste. Pierre Le Gros is a name which served to illustrate greatly the art of sculpture during the seventeenth century. He was born at Paris 1656, but did not long abide among his countrymen, having repaired to Rome at the age of ten years. N. Coustou, born 1658, excelled in the art of modelling to such a degree, as rarely to use the pencil. His draperies are rich and flowing; his style chaste and delicate; but he does not seem to have caught the genuine spirit of the antique. M. Chabry, a pupil of Puget, was born in 1660. The chief of his performances embellish the town of Lyons. P. Le Pautre was born in the same year. His name is immortalized in France by the group at the Tuileries of Æneas bearing the body of his father Anchises. J. L. Lemoyne, born at Paris 1665, was an élève of Coysevox. R. Le Lorrain, born in 1666, was distinguished for scientific style, elegant and piquant expression, and masterly handling of the marble. He formed two sculptors, whose productions reflect honour on his tutoring. These were Lemoyne and Pigalle. A. Cayot was born in 1667, and wrought fourteen years under Vanclève. L. Magnière died in 1700. P. Mazeline in 1708. F. Coudrai, pupil of Coysevox, and who became first sculptor to the king of Prussia, died 1727. J. Thierry, born at Lyons 1669, was invited to Spain, where he wrought many years in marble, bronze, and lead, for the gardens and palace of St. Ildefonso. R. Frémin, born at Paris in 1672, worked at Rome in the school of the Chevalier Bernini. C. Falconet was born at Lyons in 1671, and died at Paris 1762. L'Amoureux, born in 1674, was an élève of Nicolas Coustou. His native city, Lyons, possesses his best productions. G. Coustou, born at Lyons 1678, was a pupil of Coysevox, his uncle. He was brother of Nicolas. His most celebrated works are—the pediment of the *Chateau d'eau*, opposite the Palais Royal, and the two fine horses placed at the entrance of the Champs Elysées. J. Rousseau, élève of Nicolas Couston, born in 1681, became first sculptor to the king of Spain, and died at Madrid. A. Vassé was born at Seine, in Provence, in 1683. Dandré Bardon commends, among others, his sculpture in the gate of the Capuchins at Paris. F. Dumont, born at Paris in 1688, was the sculptor of the two figures of St. John and St. Joseph, as well as the two corresponding ones of St. Peter and St. Paul, which decorate the portal of St. Sulpice. The Dominicans of Lisle have also a fine specimen of this sculptor's ability, in the mausoleum of Louis de Melun. G. Boucharden, born in 1698, belongs to the school of Guillaume Coustou. In the construction of the fountain in the Rue de Grenelle at Paris, he has displayed his talent as an architect as well as statuary; and another performance well worthy of eulogy is the equestrian statue of Louis XV. erected in the place of that name, and destroyed in 1792. The horse was a perfect *chef-d'œuvre*. The expression of this artist was, generally speaking, rather sweet than

sublime—his ideas learned rather than bold. L. S. Adam, born at Nancy in 1700, after having studied at Paris under the most able masters, repaired to Rome, where he was employed to restore, among others, twelve antique statues, exhumed from the ruins of the palace of Marius. Two colossal figures by this artist, representing the Seine and the Marne, decorate the head of the cascade at St. Cloud. C. Francin was born at Strasburgh in 1701. Jean Baptiste, son of Jean Louis Lemoyne, was born at Paris in 1704. His two most famous works are a monument dedicated to Louis XV. in 1744, by the states of Bretagne, and the colossal equestrian statue of the same prince at Bordeaux. Lemoyne was likewise author of the mausoleum of Mignard (a very rich piece of sculpture), as also of that of Crebillon. René Michel Slodtz, better known by the appellation of Michel-Ange, was born at Paris in 1705, and demands the praise due to a style grand although simple, and to a skill in representing draperies which has, perhaps, seldom found a parallel in modern art. N. S. Adam (brother to the artist of that name before mentioned), was born at Nancy in 1705. A basso rilievo in the chapel at Versailles, representing the martyrdom of St. Victoire, is amongst the number of his most successful works. He took part with his brother in the principal group of the basin at Versailles. F. G. Adam, another brother of the preceding, was born at Nancy in 1710. J. B. Pigalle, born at Paris in 1714, was a pupil of Le Lorrain, and Lemoyne the father. This sculptor wrought at Lyons a statue of Mercury, which alone sufficed to raise his reputation. The group of infants is also fine, embellishing the façade of St. Louis at the Louvre—more particularly the *naïve* figure of an infant holding a cage from which a bird has escaped. The mausoleum of Marshal Saxe, at Strasburgh, and the pedestrian statue of Louis XV. in bronze, erected at Rheims, are both regarded as *chefs d'œuvre* of execution. Amongst the pupils of this artist, we may particularize M. M. Mouchy (his nephew), Moette, Lebrun, Bocquet, and Dupre, which latter passed his life very obscurely, lending his talent to more fortunate artists, who thus fathered works above their own ability. J. F. J. Saly, born at Valenciennes in 1717, was author of a pedestrian statue of Louis XV., placed in his native town. His "second best" was an equestrian statue in bronze of Christian IV., king of Denmark, which was erected at Copenhagen.

It may not be uninteresting to the reader to possess the following list of French sculptors who were flourishing at the commencement of the present century, and many of whom are, no doubt, still pursuing their honourable avocation:—J. L. Boyer, élève of Allegrin; L. F. Boizot; J. B. Budelot and —— Cartellier, both pupils of Bridan the elder; T. N. Delaistre, pupil of Lecomte and of Vassé; he made the statue of Phocion at the Conservative Senate; J. Demontreuil; E. J. Dumont, élève of Pajou; Esparcieux, author of a well known bust of Raynal; Joplere, pupil of Berruer, and author of an ivory group representing the Death of Lucretia; J. P. Le Sueur; P. Mérard, of the school of Bouchardon; Monot, élève of Claude Vassé; Pettitot; C. Ramey; P. Roland, pupil of Pajou, the executor of a marble bust of Admiral Ruyter, for the gallery of the Tuileries; Thierard, pupil of Barthélimi; J. B. Stouf, pupil of Coustou; Boquet; P. C. Bridan, the younger, author of a fine bust of the Duke of Marlborough; Brunet; Chardin; J. M. Renaud; Mouchy, author of a marble bust of the Duc de Sully for the gallery of the Tuileries; F. Masson; Chaudet, pupil of Stouf, and author of the colossal bust of the Emperor Napoleon, formerly in the hall of the *Corps Législatif*, and of a bust of the empress; M. Clodion; Comolli, a Piedmontese; C. L. Corbet, pupil of Berruer; J. L. Couasnon; J. C. N. Lucas; J. F. J. Leriche, superintendent of the sculpture at the manufactory of Sèvres; F. F. Lemot; Dumont; Lange, of Toulouse; E. P. A. Gois, and his son and pupil; Dejoux; Salvage; Renaud; P. N. Beauvallet; Blaise, author of a fine marble bust of Giulo Romano; Montpellier, pupil of Lemoyne; Lorta, pupil of Bridan, *père;* Foucou; D'Egensviller; Deseine; Cardelli; A. Pajou, pupil of Coustou; Houdon; P. Roland; Allegrin; and, finally, Moëtte, pupil of Pigalle.

Nor has the gentler sex forborne to pay its devoirs to this interesting art. Mad. Julia Charpentier, a pupil of Pajou; Mad. Antoinette G. Desfonts, pupil of Carlini; and Mad. Milot, may be particularised with high commendation.

A wide field for observation presents itself in turning to the catalogue of Spanish sculptors, and we regret that our confined limits will not allow us to dwell on it as the theme deserves. We shall, however, take a rapid glance over the principal names, commencing with that of Aparicio, who flourished in the eleventh century, and was commissioned by Don

Sancho the Great to construct the shrine of St. Millan, still preserved in the monastery of Yuso, and presenting, if we consider its remote date, great merit both of grace and proportion. Aparicio was assisted in his work by Rodolphe. About the same time flourished Mateo, sculptor and architect. Bartolomé made, in 1278, nine stone statues, of the size of life, for the gate of the cathedral church of Tarragona. J. Castayls, of Barcelona, lived towards the end of the fourteenth century, as did also Annrique, who executed the rilievi of the tomb of Don Henry II. F. Gonzalez flourished in 1399, and Centellas in 1410. A. and F. Diaz, A. F. de Sahagun, A. Rodriguez, A. Gonzalez, A. Martinez, Alvar Rodriguez, Christophe Rodriguez, J. Fernandez, F. Garcia, F., J. and M. Sanchez, J. Alfonzo, John Fernandez, John Rodriguez, M. Ruiz, P. Gutierrez Nieto, together with P. and A. Lopez, were all employed, from 1418 to 1425, in executing the ornaments of the principal façade and tower of the cathedral church of Toledo. To this number we may add A. Gomez, James Rodriguez, Garcia Martinez, and John Ruiz. The marble altar-piece of the grand altar of the church of Tarragona was commenced in 1426 by P. Juan, and finished afterwards by his associate G. De La Mota. A. De Lima flourished at Toledo in 1459, as did also F. De Las Arenas, F. Garcia, &c. The sculptors belonging to the last half of the fifteenth century are:—J. Castelluou, sculptor and goldsmith of Valencia, and James his son; the works of both are considerably valued. J. Aleman, of Toledo, eminent for the beautiful attitudes and draperies of his statues. G. De Siloé, who obtained great reputation at Burgos from his tomb of King John II., and of the Infant, Don Alfonso. Paul Ortiz, one of the most famous names in the circle of Spanish art, and the most considerable of the restorers of sculpture. Andres, who wrought in conjunction with Nicolas:—their performances, as also those of J. De La Cruz, have a Gothic character, but display much facility of execution. B. De Ortega must not be forgotten amongst the masters of Seville, nor (still more particularly) Dancart and his pupil Marco.

Among the most eminent of Spanish sculptors who adorned the beginning of the sixteenth century may be ranked A. De Fries, B. J. Moran, Christiano, J. De Guadalupe, F. De Aranda, F. De Cibdad, Guillemin Digante, J. De Aranda, J. De Augos, J. Peti, P. De St. Michel, Rodrigo, Salas, Solozano, J. De Lanos, Laberrox, and Luxan, each of whom contributed more or less to the advancement of the art generally, and in particular to the sculptures embellishing both exterior and interior, and to the beautiful shrine, of the cathedral of Toledo. In the course of the same half century—namely, from 1500 to 1550 appeared P. Millan, and his son John; J. Olotzaga, sculptor and architect; F. De Lara; G. Orozco; S. De Aponte, whose productions manifest a most refined taste; D. Micier, pupil of Dancart; J. Perez, of Seville, author of several colossal figures for the cathedral of that city; John, pupil of G. F. Aleman; J. Morlanes, who first among the Spanish sculptors adopted the style of Albert Durer, which subsequently became general; B. De Aguilar and G. De Cardenas, who were selected, with F. De Sahagun and P. Izquierdo, to adorn with sculptures the ecclesiastical theatre of the University of Alcada de Henarez; R. Aleman, remarkable for his grotesque compositions; J. Millan, son and pupil of Peter; B. Ordonez, of Barcelona, one of the most celebrated artists of his time, particularly in bassi rilievi of marble; &c. &c. We must not omit the famous Alfonso Berruguete, who likewise adorned this period, as sculptor, painter, and architect. This illustrious artist, after having long sojourned at Rome, where he studied under Vasari and Buonarroti, returned to his native country; and was the first to establish there perfect correctness of drawing, the most beautiful proportions of the human body, antique grandeur and expression—in short, all which gives life to marble or to canvas. Saragossa, Grenada, Valladolid, and Salamanca, as well as the capital itself, all contain evidences of the talent of Berruguete, whose return threw into the shade the artist who had previously occupied the largest share of public attention, Philip De Vigarni.

The interval from 1550 to 1600 was not fruitful with respect to the followers of sculpture in Spain; there are, however, a few great names to be selected. Among these are:—J. de Navas, pupil of Berruguete, with J. de Valencia, from the same school. P. de Salamanca had the honour of obtaining, in 1558, a royal edict whereby the art of sculpture was elevated from the mechanical vocations to the rank of a liberal profession. Christopher of Salamanca deserves also honourable notice. But the most celebrated artist belonging to this era was Paul de Cespedes, born at Cordova, and one of the first of Spanish artists. Not only did he successfully practise painting, sculpture, and architecture,

but found time also to court the muse of poetry. The elegance and purity of his drawing are admirable, as is the noble air of his figures. He was skilful in anatomy, had a perfect knowledge of chiaroscuro, and excelled in colouring.

The seventeenth century produced A. Sardigna and G. Hernandez or Fernandez; the latter of whom embellished with his works Madrid, Salamanca, and, above all, Valladolid. This artist followed the impressive style of Michel Angiolo. He had the assistance of his kinsman and pupil J. F. de Hibarne. A. Pujol, of Catalonia, composed and designed with great spirit and taste, and his draperies are particularly admirable. E. Pereyra, a Portuguese, who settled early in Spain, left, among other works, a statue of St. Bruno at Madrid, eminent for character and expression. J. M. Montagnez had the talent to give his figures expressive and natural attitudes. A. Cano, born at Grenada in 1601, was an admirable sculptor; abundant proof of which is to be found in the temples of Seville, Cordova, Madrid, &c. L. F. de la Vega, born in Asturias, died at Oviedo in 1675. Don J. de Rebenga, of Saragossa, obtained a high reputation for his little figures in wax, which were remarkable for their grace and finish. J. de Mora died in 1725. Peter Roldan, and Louis his son, were both greatly esteemed among the sculptors of their day.

The eighteenth century gave birth in Spain to several excellent sculptors. Don P. Duque Cornesso, of Seville, and Don J. de Hinestrosa, both deserve favourable notice. A. Salvador, surnamed *the Roman*, died in 1766. L. S. Carmona, in 1767. Philip de Castro, of Galicia, is a most prominent artist of this era, and contributed greatly to spread the principles of fine taste throughout his country. He died in 1775. F. Gutierrez, in 1782. Besides these we may particularize Zarcillo y Alcaraz, J. P. de Mena, C. Salas, and E. Alvarez.

For this list of Spanish artists we must confess ourselves indebted to the work published at Madrid, in 1800, in 6 vols. 12mo. entitled *Diccionari historico de los mas illustres Professores de las Bellas Artes en Espagna, compuesto por* Don Juan Augustin Cean Bermudez.

We select the following names from the list of sculptors who have rendered themselves celebrated in Germany, Holland, or Russia. F. Duquesnoi, born at Brussels in 1594, was surnamed by the Italians *the Fleming*, by which appellation he is best known. This artist was most successful in the representation of infants, in which department of sculpture he has been rarely excelled. P. Buyster, born at Brussels in 1595, passed the greater part of his life in France, where he died at the age of 84. Sebastian Slodtz, born at Anvers 1655, went to perfect himself in the French school of Girardon. A. Quellius, also of Anvers, embellished his native city with many admirable productions. G. Van Obstal died at Paris in 1668. Albert Durer, so famous in other branches of the fine arts, excelled also in sculpture, both in stone and wood. L. Kern, and his son J. J. Kern, were also celebrated in their day. The latter practised a long while in England, where he died in 1668. G. Leygebe, born in 1630 in Silesia, died at Berlin in 1683, in possession of the singular art of cutting beautiful little equestrian statues out of large ingots of iron. One of his most esteemed performances of this kind is at Dresden, and represents Charles the Second of England, as the Chevalier St. George. M. Rauchmüller just preceded A. de Schlüter, of Hamburgh, who learnt the art of sculpture at Dantzic, and afterwards repaired to Rome, where he attached himself to the manner of Michel Angiolo. B. Permoser, who died in 1732, is better known by his Christian name, Balthazar. F. X. Messerschmidt adorned Vienna, his native town, with many excellent performances. C. Osner, of Nürnburg, died at Petersburgh in 1704. The Count Rastrelli, of Italian origin, Zwenkof, Dunker, and Stahlmeyr, of Vienna, all practised in Russia; as likewise did Domacht, of Swiss origin. Schwartz, of Dresden also, settled at Petersburgh; nor must we omit to notice a Russian artist of the name of Pawlof, who, having studied under Dunker, resorted to Paris for further instruction. To this nomenclature we may add the names of G. Petel, who died in 1636; N. Millich, in or about 1669; M. Barthel in 1674; G. G. Weyhenmeyer, in 1715; A. de Papenhoren, about 1745; and A. Nahl, V. Sonnenschein, and Ohnmacht, who were living at the commencement of the present century.

In our own country sculpture has not been very successfully practised until late years. The reader is, however, congratulated on the chance now exhibited of this department of art, like painting, reaching a high point of excellence in these islands. There are several admirable sculptors at present elevating with their productions the artistical reputation of the British empire, and we can reflect with pride on such names as Nollekins, Wilton,

Gibbons, Scheemaker, and Banks. The following are among the most eminent of our living sculptors:—J. Bacon, E. H. Bailey, R.A., J. G. Bubb, F. L. Chantrey, R.A. J. Flaxman, R.A. Professor of Sculpture to the Royal Academy, S. V. and L. Gahagan, G. Garrard, A.R.A., J. Henning, C. Rossi, R.A., Rouw (modeller of gems and cameos), P. Turnerelli, and R. Westmacott, R.A. Nor must we omit to mention the fair sculptor, Miss C. Adams.

SCULPTURE. [Lat. *sculptura*, from *sculpo*, to *carve*.] The origin of this art may be sought in vain even in the most remote times to which we have any means of throwing a retrospective glance. There can be no doubt that the system of hieroglyphics or *picture writing*, as it has been termed, first employed the chisel of the sculptor, who traced rudely on stone, on wood, or the bark of trees, those shapes by which he meant to express his wishes or designs. It is probable, also, that idolatrous feeling was a great deal mixed up with the matter, as it was doubtless found necessary to place before uneducated people *images* of their gods, in order to keep steadily burning within their souls the flame of devotion.

The pursuit arising from this necessity, indeed, contributed to carry the art to that degree of perfection which it afterwards attained among some of the nations of antiquity. It is worthy of observation, that even in the dark or "middle ages," the ritual of the church of Rome, particularly that portion which instilled veneration for her martyrs and saints, sufficed to preserve among the Italians some vestiges of the art of sculpture; and it is fair to conclude hence (since human nature is always pretty much the same), that a similar veneration for heroes and demigods would, among the ancient nations, have a corresponding effect. In this view of the case, the Chaldeans may be supposed to have been among the very earliest practisers of the art of sculpture, they having unquestionably been the first idolaters; and accordingly we find their skill in this way borne witness to by sundry ancient writers, including Apollodorus and Pliny.

In turning to the Old Testament (possibly the most ancient record in existence), the first intimation that we find of the art of sculpture is the information that when Jacob, by divine command, was returning to Canaan, Rachel, his wife, carried with her the *teraphim*, or idols of her father. These must, by the by, have been small, since she contrived to conceal them effectually, notwithstanding her father's search. We know not of what substance these images were wrought, or in what manner. The first person particularized as an artist (if we except the eastern tradition of Abraham's father having been a statuary) is Bezaleel, who formed the cherubim covering the mercy seat.

The Egyptians, without doubt, cultivated the art of sculpture; but there were certain circumstances operating among them to obstruct its developement. In the first place, the persons of the Egyptians were deficient in grace and symmetry; and they had consequently no perfect standard whereby to model their taste. In the next place, being restricted by law to the principles and practices of their forefathers, any vicious manner which had once got introduced into their system of art was sure to be perpetuated. Thus their statues were always constructed in the same stiff attitude, with the arms hanging, like those of a wooden doll, perpendicularly at their sides. All the large figures, in Egyptian sculpture, were executed in calcareous stone, in basalt, granite, or alabaster. No instances appear of their having resorted to the use of bronze. Many of these are colossal. The smaller statues, however, are not so limited in point of material: bronze, gold, wood, marble, terra cotta, &c. enter by turns into the composition of them. The eye was frequently of different material from the rest of the statue, and, in many instances, composed of a precious stone or metal. The valuable diamond of the late Empress of Russia (the largest and most splendid hitherto known), is confidently affirmed to have formed one of the eyes of the famous statue of Scheringham, in the temple of Brama. Several of these statues which still remain are made of wood or baked earth; those of the latter substance are covered with green enamel.

The Phœnicians, the Persians, the Etruscans, or ancient Tuscans, all most probably preceded the Greeks in a successful cultivation of the art of sculpture, though by no means to an equal extent. The statuaries of Etruria, indeed, seem to have presented high claims to favourable notice. Among their chief productions two several styles have been traced out: the first straight lines, stiff attitudes, an absence of ideal beauty about the head, and, in short, other defects incidental to an art in its state of infancy. But, in the second style, appearances become wholly changed, and ancient Etruscan sculpture may be said to bear some resemblance to the grand and somewhat overcharged man-

ner of the great modern Etruscan artist, Michel Angiolo: the joints being strongly marked, the muscles raised, the bones distinguishable, and great knowledge displayed of the science of anatomy. Millin adds a third period to the history of Etruscan art, which is said to have commenced at the conquest of Greece by the Romans, an epoch at which the Greek artists flocking to Rome and other parts of Italy, the Etruscans became their imitators, and, at length, their rivals. It is probably of this period that Horace speaks, when he praises (in the 1st satire of the 10th book) the Italian artists, most likely with particular reference to those of Etruria, as superior to the boasted artists of Greece.

According to ancient history, the Greeks did not emerge from a savage state until a long time after the Egyptians, the Chaldeans, and Indians had obtained a considerable degree of civilization. The originally rude inhabitants of Greece were civilized by colonies which arrived among them, at different times, from Egypt and Phœnicia. These introduced, by degrees, the religion, the arts and letters of their parent states. The original statues of the gods, however, were extremely rude. The earliest objects of idolatrous worship have in all instances been the heavenly bodies; and it was not until hero-worship was engrafted on the planetary that the sculptor thought of giving to the sacred statue any part of the human form. About the era of this revolution in idolatry, the art of sculpture appears to have been introduced among the Greeks. The first representations of their gods were round stones placed upon cubes or pillars; and these stones were afterwards so shaped as to give them somewhat the appearance of a head. Pausanias describes a Jupiter of this kind, at Tegeum in Arcadia. These representations were denominated *hermes;* not, according to some, because they represented Mercury, but from the word *herma*, which signified a rough stone.

The art, having passed the periods of its infancy and childhood, proceeded with rapid steps; particularly at Athens and Sicyon, its two most celebrated seats. Climate, no doubt, did much for the ancient Greeks, and would, of course, be equally advantageous for the modern ones, did not ages of subservience and luxury appear to have thoroughly vitiated their national character. Probably no country under the face of the sun is blessed with a serener air, or possesses in a greater proportion that equable and genial warmth so well calculated to develope, in the human body, the principles of muscular strength and activity, as well as the winning delicacies of female loveliness; and never was there any people more gifted with a profound sense of beauty, or more desirous to improve it, than its old inhabitants. Of the four wishes of Simonides, the second was to have a handsome figure; and among the Lacedæmonian women so great was the abstract love of beauty, that they are said to have kept statues of Narcissus, of Hyacinth, &c. in their chambers, in the hope (no doubt often realised) that by constant contemplation thereon, they might produce beautiful children.

A variety of circumstances combined to render the models of beauty subservient to the cultivation of the fine arts. There were no absurd prescriptions, as in Egypt, to encumber the free spirit of the artist. He had the finest opportunities for study in the public places, where the Grecian youth, requiring no other veil than innocence and purity of manners, went through their various exercises, gymnastic or otherwise, naked. The Greeks preferring generally natural accomplishments to artificial ones, the first honours and rewards were often decreed to such as excelled in corporal agility and strength. Statues were sometimes raised to wrestlers, and the statuary was stimulated to excellence, since the work of his hands was considered as the highest token of honour which merit could aspire to. The number of statues erected on various occasions was consequently prodigious; and, of course, the number of artists must have been great, their emulation ardent, and their progress rapid.

It was under the government of Pericles that Grecian art may be said to have reached, altogether, its highest point of perfection. At this epoch flourished the illustrious sculptor Phidias. From the matchless works of this artist has arisen the phrase *signum Phidiæ*, to denote any piece of sculpture of a decidedly high order. He employed his transcendent talent principally to illustrate ideal beauty, and, above all, to represent grand and heroic subjects, or figures of gods and goddesses. His two colossal statues of Jupiter at Olympius and Minerva at the Parthenon were above all praise.

In contemplating the Elgin Marbles (which refer to), the amateur or student may feel confident that he has before him a variety of those inestimable performances which, having been directed and imagined by Phidias (indeed, partly exe-

cuted by his chisel), were for upwards of seven hundred years the wonder of the ancients; having been, according to Plutarch, who wrote in the reign of Trajan, considered inimitable for beauty, dignity, and grace. Plutarch's testimony, in fact, puts it beyond question that the sculptures adorning the Parthenon were the actual productions of this "mighty master," who had been engaged by the munificent Pericles in the execution of these majestic works, and under whom several other eminent artists were employed.

Winckelmann, in his "History of Art," observes that the *fine* style in statuary was introduced by Praxiteles and Lysippus, and that the manner of managing draperies in sculpture, previously, was extremely simple. This opinion is, however, to be received with great caution. If the art of sculpture received from Praxiteles the germ of any novel fascinations, they probably resided rather in the refinements of the graceful than in that which is properly called the fine or beautiful style. He may have given to the heads of his figures (especially those of his women) an air of greater delicacy or voluptuousness; but we suspect it must be admitted, from a candid and thoughtful examination of the Elgin marbles, that the art of the statuary had attained the limits of its perfection in the age of Pericles and Phidias. "Nothing is more perfect," observes Cicero, "than the statues of Phidias," (Orat. sect. 2). A connoisseur, used to examining the masterpieces of antiquity, will readily discover, in the detached sculptures of the Parthenon (and more especially in the parts of those statues which have suffered least injury from time), the grand and learned style of the Laocoon, the Torso, and the Gladiator; the same skill in the expression of the skin, the same life inspired, as it were, into the senseless stone, the same harmony of proportion, the same general perfectness. In the statues of females, again, the dignity and grace of posture, and the richness of drapery (whose folds are adjusted with such singular adroitness), if they do not surpass, certainly do not fall beneath, the most complete works of the kind, the preservation of which enables us to form a comparison.

In the modern practice of the art of sculpture the greatest name is, perhaps, that of Michel Angiolo, whom we took occasion to notice in the *Catalogue Raisonnée* of our preceding article. "Michel Angiolo," says his English biographer, Mr. Duppa, "considered sculpture as his profession, and his studies throughout his whole life were more particularly directed to it, than to painting or to architecture. His first work of celebrity was a group of a Madonna with a dead Christ, called in Italian *la Pietà*. The subject, in its nature, is impressive, and the composition is felt with appropriate simplicity; and of all his works, it is that which seems to have cost him the most laborious attention.

"With Michel Angiolo expression and character were a primary consideration; and although he set the antique sculpture before him as an example and a guide, this marked distinction is to be taken between his view of the subject and that of the ancients. He made ideal beauty and *form* subservient to expression; they, on the contrary, made expression and animation subservient to *form*. The Laocoon* and his two sons have more expression in their countenance than all the other antique statues united; yet Sir Joshua Reynolds has observed, that even in this instance, there is only the general expression of pain, and that the pain is still more strongly expressed by the writhing and contortion of the body, than by the features. In consulting all the examples which are left of ancient sculpture, it would seem, they established it as a general principle, that to preserve the most perfect beauty, in its most perfect state, the passions were not to be expressed; all of which may be supposed, in some degree to produce distortion and deformity in the features of the face. The group of the Boxers is a remarkable instance in favour of this opinion; they are engaged in the most animated action with the greatest serenity of countenance; and without attributes, it would be difficult to discriminate between the Juno or the Minerva, the Bacchus or the Meleager; nevertheless, in the Apollo Pythius there is a graceful, negligent, and animated air, and in the Discobulus a vulgar eagerness of expression, which deserves to be remarked, to show the nice discrimination of character which the an-

* "The Laocoon is finished with the chisel, showing an incredible command of execution; but in Rome I once heard a very eminent sculptor say, that he believed the statue had been previously finished with the rasp and file, and that the marks of the chisel were made afterwards, to give the appearance of facility to the execution, and at the same time a roughness to the surface, which was more favourable to the general effect of the figure than if it had been left quite smooth. If the statue had been brought down to this surface at once, he said, the dexterity of the artist was more wonderful than any thing he knew of in sculpture."

cients were capable of making, when the expression was not incompatible with what they considered as a higher excellence.

"The Bacchus of Michel Angiolo is an attempt to unite a degree of drunkenness with his character; but, inasmuch as that effect is produced, both the sculpture and the deity are degraded: of this character there are several examples in antique gems, but however skilful the representation may be in so small a size as a gem, it is certainly not a fit subject for a statue of the proportion of life. The two female figures composing part of the present monument of Julius II. are simple and elegant; and those of MORNING and NIGHT, in the Lorenzo Chapel, are composed with great grandeur of design.

"The works of Michel Angiolo have always a strong and marked character of their own, his thoughts are elevated, and his figures are conceived with dignity; and if he wants the purity and correctness of the antique, (which he certainly does, in an eminent degree) his faults never degrade him into feebleness; when he is not sublime he is not insipid; the sentiment of aggrandizing his subject ever prevails, and however he may fail in the execution, his works are still entitled to the first rank among modern productions in sculpture. Barry has truly observed, when speaking of his statue of Moses, that although that figure may be considered as rather extravagant, yet it contains such proofs of knowledge and capacity as will ever make his name sacred among artists; and this criticism may be extended with equal propriety to his other works, whatever may be their faults.

"Michel Angiolo was of the middle stature, bony in his make, and rather spare, although broad over the shoulders. He had a good complexion; his forehead was square, and somewhat projecting; his eyes rather small, of a hazel colour, and on his brows but little hair: his nose was flat, being disfigured by a blow he received from Torrigiano, a contemporary student with Michel Angiolo, and a sculptor of great merit, but a proud, inconsiderate, and ungovernable character. Bevenuto Cellini, in his own life, has recorded this affair with Michel Angiolo, as it was related to him by Torrigiano himself. 'His conversation one day happened to turn upon Michel Angiolo Buonarroti, on seeing a drawing of mine made from the celebrated cartoon of the Battle of Pisa. "This Buonarroti and I (said Torrigiano), when we were young men, went to study in the church of the Carmelites, in the chapel of Masaccio; and it was customary with Buonarroti to rally those who were learning to draw there. One day, amongst others, a sarcasm of his having stung me to the quick, I was extremely irritated, and, clutching my fist, gave him such a violent blow upon his nose, that I felt the cartilage yield as if it had been made of paste, and the mark I then gave him he will carry to his grave."'

"B. Cellini's account of Torrigiano is, —'That he was a handsome man, but of consummate assurance, having rather the air of a *bravo* than a sculptor: above all, his strange gestures and his sonorous voice, with a manner of knitting his brows enough to frighten every man who saw him, give him a most tremendous appearance, and he was continually talking of his great feats amongst those *bears of Englishmen* whose country he had but recently left.'

"We are indebted to Torrigiano for the monument of Henry VII. in Westminster Abbey, finished, according to Stow, in 1519, and for which the sculptor received a thousand pounds. His ungovernable and restless habits often precipitated him into great difficulties, and the circumstances of his death furnish a melancholy instance of the vicissitudes of life, and the baneful effects of inquisitorial jurisprudence.

"Upon leaving England he visited Spain, and after distinguishing himself by many excellent works, was employed by the Duke D'Arcus to execute in marble a Madonna and infant Christ, of the size of nature, with high promises to be rewarded in proportion to his merit. As the Duke was a grandee of the first rank, Torrigiano flattered himself with a proportionate expectation. After much study and application he completed his work to his own satisfaction; and his performance was seen with delight and reverence. Impatient to possess this treasure, the Duke immediately sent for it; and that his generosity might be displayed to the greatest advantage, he loaded two lacqueys with the money to defray the purchase. The bulk was promising; but when the bags were found to contain nothing but brass maravedi, which amounted only to the small sum of thirty ducats, vexation and disappointment roused Torrigiano's resentment, who considering this present rather as an insult than as a reward for his merit, on a a sudden snatched up his mallet, and, without regard to the perfection of his workmanship or the sacred character of the image, he broke it into pieces, and

dismissed the lacqueys with their load of farthings to tell the tale. The grandee, with every passion alive to this merited disgrace, and perhaps, impressed with horror for the sacrilegious nature of the act, presented him before the court of Inquisition, and impeached him for his conduct as an infidel and a heretic. Torrigiano urged the right of an author over his own creation: Reason pleaded on his side, but Superstition sat in judgment, and he was condemned to lose his life with torture; but the holy office lost its victim—Torrigiano starved himself to death in prison (1522), to avoid its torments and the horror of the execution! He was about fifty years of age." Vasari, tom. iii. p. 76.

Canova and Thorwaldsen, together with our own Chantrey, occupy the topmost rank among sculptors of the present day, or rather did so until death snatched away the former of these eminent artists. Still we are inclined to think that the performances of Canova have been somewhat overrated. Many of them have a studied and theatrical air quite inconsistent with good taste as well as with the higher productions of Grecian art, which this sculptor always affected to copy. Mr. Mathews, in his "Diary of an Invalid," speaking of Canova's Venus, one of his most vaunted figures, says:—"The boudoir of the Pitti Palace, in the centre of which stands Canova's Venus, brilliantly illuminated, and lined with mirrors, reflected the beauties of her figure in all directions, and exhibited the statue to the highest advantage. This is the statue which occupied the pedestal of the Medicean Venus during her flight to Paris, but I can find nothing divine about Canova's Venus. She is not worthy to officiate as chambermaid to the goddess of the Tribune. It is simply the representation of a modest *woman*, who seems to shrink from exposure in such a dishabille; while her Grecian prototype, in native innocence and simplicity, scarcely conscious of nakedness, seems to belong to an order of beings to whom the sentiment of shame was as yet unknown. The attitude of Canova's is constrained and perhaps even awkward. This may arise from the manner in which she compresses that scanty drapery which the sculptor has given her,—intended, I suppose, to 'double every charm it seeks to hide.' The symmetry, too, is by no means perfect. The head is manifestly too large. It is perhaps unfair to attribute to the sculptor the faults of the marble; but it is impossible not to remark, that even if the work had been more perfect than it is, the unfortunate flaws, just in those places where they are most *mal à-propos*, must still have detracted much from its beauty. Many of the copies of this statue seem to me quite equal, if not superior, to the original; an infallible proof, if the remark be correct, of its mediocrity of merit."

The same intelligent traveller thus speaks of the talents of Thorwaldsen, a Danish sculptor practising at Rome:—"There is a freshness and originality in his designs, guided by the purest taste. What can be more elegant and beautiful than his *basso-rilievo* of *Night?* His *Venus victrix* approaches nearer than any modern statue to the Venus di Medicis. There is a *shepherd*, too, which is a delightful specimen of simplicity and nature;—and the charm of these statues is, that while they emulate they have not borrowed any thing from the works of the ancients."

On the works of our own Chantrey, we are disposed to enlarge with all the spirit of nationality; but a recollection of our confined limits, together with that sense of delicacy which restrains us from discussing minutely the merits of a living artist, withhold us. Mr. Chantrey's principal productions are busts; but the work which first fixed his high reputation, and is still regarded by many as his *chef-d'œuvre*, is a group of sleeping infants, to be seen in the cathedral at Lichfield.

To the productions of ancient art, however, we must after all return, if we are desirous of contemplating the sublimest as well as the most beautiful specimens of sculpture. We shall, therefore, now proceed to give a particular account of the ideas entertained by the Greeks respecting the standard of beauty in the different parts of the human body. With regard to the head, the profile chiefly admired by them consists in a line almost straight, or marked by inflexions so gentle as scarcely to be recognised as such. The forehead and nose, indeed, in female or youthful figures, form a line which approaches to the perpendicular. It has been often held, as a principle of ancient beauty, that the forehead was extremely high. This opinion, however, is subject to dispute; for many ancient writers, and artists also, assure us that the Greeks considered a *small* or *low* forehead essential to beauty. Thus the Circassians suffered their hair to shade the forehead almost to the eyebrows. Indeed, it will be evident that, to give an oval form (the most esteemed) to the countenance, it is requisite that the hair should cover the forehead, and make a curve about the temples; or else the face, which

terminates in an oval form in the inferior part, will be angular in the higher part, and the proportion consequently destroyed. This rounding of the forehead may be seen in all handsome persons, in all the heads of ideal beauty, in ancient statues, and especially in those of youth.

Large eyes are generally considered beautiful; their size, however, is of less importance in sculpture than their form and the manner in which they are most used. The eye has been often made a characteristic feature in the heads of different deities. Apollo, Jupiter, and Juno have the eye large and full. In the statues of Pallas they are also large, but by lowering the eyelids the virgin air and expression of modesty are delicately marked. The celebrated Venus de Medici, however, affords sufficing proof that large eyes are by no means essential to beauty: hers are small, and the gentle elevation of the lower eyelid imparts to them a languishing look and an enchanting sweetness. In ideal beauty, the eyes are always deeper than in nature, and, of course, the eyebrows have more prominency. By deepening the cavity of the eye, the statuary increases the light and shade, thus imparting to the head more expression and reality. In ancient statues the eyebrows are sometimes completely joined.

The mouth is, after the eyes, the greatest vehicle of expression, and therefore demands to be next considered. The Grecian artists made the lower lip fuller than the upper, in order to give an elegant rounding to the chin. The lips are generally closed in figures of mortals, and a little open in those of the gods. Those of Venus are half open. The teeth are seldom shown, except in laughing satyrs.

It was not deemed consistent with the principles of ideal beauty to interrupt the rounding of the chin by the introduction of a dimple. Hence, it may fairly excite suspicion, when dimples are found either on the chin or cheek of an ancient statue, that they are the innovations of a modern hand.

Modern artists appear often to have overlooked the ear, as a portion of the head undeserving of careful attention; but they should bear in mind that the Grecian artists, whom they affect to admire and imitate, bestowed much consideration and great pains on this to them unimportant feature; and were particularly anxious, in taking likenesses, to copy the precise shape of their subject's ear.

The disposition of the hair, too, presents another test by which the undoubted works of ancient art may be recognised. On coarse, hard stones the hair was short, and appeared as if it had been combed with a wide comb; this kind of stone being difficult to work, and requiring immense labour: but when the finer sorts of marble were submitted to the chisel of the Grecian artist, the obedient locks descended in thin and ample ringlets; in the heads of women they were thrown back, and tied behind in a waving manner, at considerable intervals, thus affording an agreeable variety of light and shade. This method was adopted with the hair of the Amazons. On the other hand, Apollo and Bacchus have theirs falling down their shoulders, which was the common habit of youth.

It is a curious fact that, with the Greek statuaries, it seemed to be a point to enlarge the natural appearance of the breasts in men, and to suppress it in women. The figures of their deities, indeed, have mostly the breasts of a virgin, the beauty of which they evidently held to consist in a gentle elevation, for so desirous were their women to conform to this standard of taste, that various arts were put in practice to restrain exuberant prominency. The breasts of the nymphs and goddesses were never represented swelling, that appearance being peculiar to women who are suckling. The paps of Venus contract and end in a point, which is considered an indispensable characteristic of perfect beauty.

In the statues of men, the lower part of the body was formed similar to the state of the living body after tranquil sleep and good digestion. The navel was considerably sunk, especially in female subjects.

In the figures of young men, the joints of the knee are slightly expressed; that member uniting the leg to the thigh without making any remarkable cavities or projections. Winckelmann observes, that "the most beautiful legs and best turned knees are preserved in the Apollo Sauroctanes, in the Villa Borghese; in the Apollo which has a swan at his feet; and in the Bacchus of the Villa Medicis." The same able connoisseur remarks, that it is rare to meet with beautiful knees either in the elegant representations of art or in the persons of young people themselves. With respect to feet and hands, there are sufficient relics to prove how scrupulously attentive the Grecian artists were to develope in these members every possible perfection; although, unfortunately, the ravages committed by time or

negligence have sadly reduced the number of instances. These extremities are, of course, most subject to mutilation, and, accordingly, we find many statues wholly destitute of them. The hands of young persons were moderately plump, with little cavities or dimples at the joints of the fingers, which tapered very gently from the root to the point, the joints being scarcely perceptible. The terminating joint was not bent, as it is so commonly found in modern statues.

It is scarcely necessary to observe that, as beauty never appears in equal perfection in every part of the same individual, perfect or *ideal* beauty can only be produced by selecting the most beautiful parts from different models. This, however, must be set about with delicacy and judgment, in order that these detached beauties, when united, may form the most exact symmetry. The ancients, nevertheless, even in the most flourishing age, occasionally confined themselves to one individual. Theodorus, who was visited by Socrates and his disciples, served as a model for the artists of his day. Phryne also seems to have been a model both for painters and sculptors. On the other hand, Zeuxis, when about to paint Helen, united in his picture the various charms of the most handsome women of Crotona.

Having thus exercised the most patient attention and care on the several portions of the human body itself, the Grecian sculptors proceeded with equal scrupulosity to invest them with becoming drapery. The vestments of the Grecian women usually consisted of linen cloth, or some other light stuff, and, in latter times, either of silk or occasionally of woollen cloth. In the works of sculpture, the linen may be distinguished by its transparency and small united folds. The principal garments worn by the Greeks were the tunic, the robe, and the mantle. The *tunic*, or that part of the dress next the body, may be seen in sleeping figures, or in those in dishabille; as, for instance, the Flora Farnese, and the statue of the Amazons in the Capitol. The *robes* of women commonly consisted of two long pieces of woollen cloth, destitute of any particular form, attached to the shoulders by a great many buttons, and sometimes by a clasp. They had straight sleeves, which came down to the wrists. The young girls, as well as the women, fastened their robe to their side by a cincture, as is still done in many parts of Greece. The cincture formed in the side a knot of ribbons somewhat resembling a rose in shape, as has been particularly marked in the two beautiful daughter Niobe. The *mantle* was called πεπλος, the Greeks (see PEPLUS), which signi properly the mantle of Pallas or Minerva; but the word was afterwards applied to those of the other deities, and subsequently of men. This article of dress was round rather than square, and when the ancients speak of *square* mantles, they allude to the addition of four tassels, which were fixed to them, two visible and two concealed under the mantle.

Women seldom wore any other head-dress than hair: using the corner of their mantle when they wished for further covering. Sometimes, however, we meet with veils of a fine transparent texture. The covering for the feet consisted of shoes or sandals, the latter generally an inch thick, and composed of sundry soles of cork.

The colour of vestments peculiar to eastern statues is curious, and must not be omitted. To begin with those of the gods: —the drapery of Jupiter was red, that of Neptune, according to Winckelmann, sea-green, which colour belonged likewise to the Nereids and Nymphs. The mantle of Apollo was blue or violet. Bacchus was clothed in white. Martianus Capella assigns green to Cybele; while Juno's vestments were sky-blue, with the occasional addition of a white veil. Pallas was robed in flame-colour; and Venus (in a painting at Herculaneum) is in flowing drapery of golden yellow. Kings were arrayed in purple; priests in white; and conquerors sometimes in sea-green.

Of the different Modes of Process in Sculpture.—Works of sculpture are performed, either by hollowing or excavating, as in metals, agates, and other precious stones, and in marbles of every description; or by working in relief, as in bassi-rilievi in the materials just mentioned, or in statues of metal, clay, wood, wax, marble, or stone.

The excavation of precious stones forms a particular branch of art called intaglio, which, together with the working them in relievo, when the term camayeu is applied to them, belongs to the art of seal-engraving.

The excavation of metals constitutes the art of engraving, in its various branches, on metal of any kind; and its relief comprises enchasing, casting in bronze, &c.

The process of hollowing hard stone or marble will need no particular description; especially as it is now wholly in disuse, except for the forming of letters in monumental or other inscriptions.

In working in relievo the process is necessarily different, according to the materials in which the work is performed.

As not only the beginning of sculpture was in clay, for the purpose of forming statues, but as models are still made in clay or wax, for every work undertaken by the sculptor; we shall first consider the method of modelling figures in clay or wax.

Few tools are necessary for modelling in clay. The clay being placed on a stand or sculptor's easel, the artist begins the work with his hands, and puts the whole into form by the same means. The most expert practitioners of this art seldom use any other tool than their fingers, except in such small or sharp parts of their work as the fingers cannot reach.

If clay could be made to preserve its original moisture, it would undoubtedly be the fittest substance for the models of the sculptor; but when it is placed either in the fire, or left to dry imperceptibly in the air, its solid parts grow more compact, and the work shrinks, or loses a part of its dimensions. This diminution in size would be of no consequence, if it affected the whole work equally, so as to preserve its proportions. But this is not always the case: for the smaller parts of the figure drying sooner than the larger; and thus losing more of their dimensions in the same space of time, than the latter do; the symmetry and proportions of the work inevitably suffer.

This inconvenience, however, is obviated by forming the model first in clay, and moulding it in plaster of Paris before it begins to dry, and the taking a plaster cast from that mould, and the repairing it carefully from the original work; by which means you have the exact counterpart of the model in its most perfect state; and you have, besides, your clay at liberty for any other work.

In modelling in wax, the artist sometimes uses his fingers, and sometimes tools of the same sort as those alluded to for modelling in clay. It is at first more difficult to model in wax than in clay, but practice will render it familiar and easy.

Of the Use of the Model.—Whatever considerable work is undertaken by the sculptor, whether basso-rilievo, or statue, &c. it is always requisite to form a previous model, of the same size as the intended work; and the model being perfected, according to the method before described, whether it is in clay, or in wax, or a cast in plaster of Paris, becomes the rule whereby the artist guides himself in the conduct of his work, and the standard from which he takes all its measurements.

Of Sculpture in Wood.—A sculptor in wood should first take care to choose wood of the best quality, and the most proper for the work which he intends to execute. If he undertakes a large work, requiring strength and solidity, he ought to choose the hardest wood, and that which keeps best, as oak and chestnut; but for works of moderate size, pear or apple tree serve very well. As even these latter woods are still of considerable hardness, if the work consists only of delicate ornaments, the artist will find it preferable to take some more tender wood, provided it is at the same time firm and close; as, for instance, the Indian tree, which is excellent for this purpose, as the chisel cuts it more neatly and easily than any other wood.

The ancients made statues out of almost every different kind of wood. At Sicyon was a statue of Apollo made of box; the statue of Diana at Ephesus was of cedar. As these two sorts of wood are extremely hard and undecaying; and as cedar, in particular, is of such a nature as, according to Pliny, to be nearly indestructible, the ancients preferred them for the images of their divinities. In the temple built on mount Cyllene in honour of Mercury, Pausanias relates, that there was a statue of that god made of citron-wood, eight feet in height. This wood was also much esteemed. The cypress likewise, being a wood not apt to spoil, nor to be damaged by worms, was also used for statues; as were the palm tree, olive, and ebony, of which latter, according to Pliny's account, there was another statue of Diana at Ephesus.

Several other kinds of wood were equally employed for this purpose, even the vine, of which the same author says there were statues of Jupiter, Juno, and Diana.

Felibien speaks of a French artist at Florence, of the name of Janni, who executed several statues in wood, in a style of finishing equal to marble, and particularly one of St. Roque, which Vasari considered as a marvellous production.

The beauty of sculpture in wood consists in the tender manner of cutting the wood, free from all appearance of hardness or dryness.

Of Sculpture in Stone and Marble.—For sculpture in marble and other stone, the artist must make use of tools made of good steel, well tempered, and of strength proportioned to the hardness of the material.

The first thing to be done is, to saw out from a larger block of marble, a block

proportioned to the size of the work which is undertaken. After this, the sculptor shapes the gross masses of the forms he designs to represent, by knocking off the superfluous parts of marble with a strong mallet or beele, and a strong steel tool called a point. When the block is thus hewn out agreeably to the measures previously taken for the performance of the work, the sculptor brings it nearer to the intended form by means of a finer point; and sometimes of a tool called a dog's tooth, having two points, but less sharp than the single one. After this he uses the gradine, which is a flat cutting tool, with three teeth, but is not so strong as the point. Having advanced his work with the gradine, he uses the chisel to take off the ridges left by the former tools; and by the dexterous and delicate use of this instrument, he gives softness and tenderness to the figure, till at length, by taking a rasp, which is a sort of a file, he brings his work into a proper state for being polished.

Rasps are of several kinds, some straight, some curved, and some harder or softer than others.

When the sculptor has thus far finished his work with the best tools he can procure, wherever certain parts or particular works require polishing, he uses pumice-stone to make all the parts smooth and even. He then goes over them with tripoli, and when he would give a still higher gloss, he rubs them with leather and straw ashes.

Besides the tools already mentioned, sculptors use also the pick, which is a small hammer pointed at one end, and at the other formed with teeth made of good steel and squared, to render them the stronger. This serves to break the marble, and is used in all places where the two hands cannot be employed to manage the mallet and chisel.

The bouchard, which is a piece of iron, well steeled at the bottom, and formed into several strong and short points like a diamond, is used for making a hole of equal dimensions, which cannot be done with cutting tools. The bouchard is driven with the mallet or beetle, and its points bruise the marble and reduce it to powder. Water is thrown into the hole from time to time, in proportion to the depth that is made, to bring out the dust of the marble, and to prevent the tool from heating, which would destroy its temper; for the freestone dust on which tools are edged is only moistened with water to prevent the iron from heating and taking off the temper of the tool by being rubbed dry; and the trepans are wetted for the same reason.

The sculptor uses the bouchard to bore or pierce such parts of his work as the chisel cannot reach without danger of spoiling or breaking them. In using it he passes it through a piece of leather, which leather covers the hole made by the bouchard, and prevents the water from spirting up in his face.

The tools necessary for sculpture on marble or stone, are the roundel, which is a sort of rounded chisel; the houguet, which is a chisel squared and pointed; and various compasses to take the requisite measures.

The process of sculpture in stone is the same as in marble, excepting that the material being less hard than marble, the tools used are not so strong, and some of them are of a different form, as the rasp, the handsaw, the ripe, the straight chisel with three teeth, the roundel, and the grater.

If the work is executed in freestone, tools are employed which are made on purpose, as the freestone is apt to scale, and does not work like hard stone or marble.

Sculptors in stone have commonly a bowl in which they keep a powder composed of plaster of Paris, mixed with the same stone in which their work is executed. With this composition they fill up the small holes, and repair the defects which they meet with in the stone itself.

In the work of Junius, *De Pictura Veterum* (lib. 2, chap. 3), and in the *Bibliothèque Grecque* of Fabricius (liv. 3, chap. 24, sect. x.) a catalogue is to be found of ancient authors who have treated of the art of sculpture. Among modern works on the theory and practice of this art we may cite the following:—Pomponii Gaurici, *De Sculptura sive Statuaria Veterum Dialogus*, Florent. 1504, 4to., and in the 9th vol. of the *Thesaurus* of Gronovius. L. B. de Albertis, *De Sculptura*, Basil, 1540, 8vo. *De Calatura et Sculptura Veterum*, by Ald. Manuce, also to be found in the 9th vol. of the *Thesaurus* of Gronovius. The 3d and 4th books of the work entitled *Gallus Romæ Hospes*, by Ludovicus Demontiosius, Rome, 1585. These have been reprinted in the *Dactyliothèque* of Gorlæus, likewise in the 9th vol. of the *Thesaurus* of Gronovius. Jul. C. Bulengeres, *De Pictura, Plastice, et Statuaria*, in his *Opuscules*, Leyden, 1621, 8vo. and in the 9th vol. of Gronovius. P. P. Rubenius, *De Imitatione Statuarum Græcarum*, in the *Cours de*

Peinture, by Depiles, Paris, 1760, 12mo. The 1st chap. of the 1st book, and the 5th and 6th chapters of the 2d book of the *Archæologia Litteraria de* Ernesti, treat *de Marmoribus, de Toreutice, et de Plastice. Commentationes duæ super Veterum Eboræ, Eburneisque Signis*, by M. Heyne, in the 1st vol. of the new Memoirs of the Royal Society of Gottingen; in the 4th and 5th vols. of which same Memoirs we find *Monumentorum Etruscorum Artis ad Genera sua et Tempora revocatorum Illustratio*, by the same.

Among Italian works:—*Il Disegno del* S. Ant. Franç. Doni, *ove si Tratta della Scultura e Pittura de' Colori, de' Getti, de' Modegli, con molte Cose appartinenti*, Venice, 1549, 8vo. Several chapters of the Introduction to *Vite de più excellenti Architetti, Pittori e Scultori Italiani*, by Vasari, treat of Sculpture. *Due Trattati, uno dalle otte principale Parti d'Oreficeria, l'altero in materie dell' Arte della Scultura, dove si vedono infiniti Segreti per lavorare le Figure di Marmo, e del gettarle di Bronzo*, da Benvenuto Cellini, Firenze, 1568, 4to. In the *Lezione* di M. Benedetto Varchi, *Sopra diverse Materie poetiche e filosofiche*, Firenze, 1549, we find a letter of Cellini on the advantage which sculpture has over painting; and another little treatise of this nature is added, by the same author, to the *Essequie di* Michel Angiolo Buonarroti, Firenze, 1564, 4to. *Discorsi sopra le Antichita Romana, di* Vincentio Scamozzi, Venice, 1582, with 40 folio engravings, contain several articles on sculpture, and on the marbles to be preferred for statues. *Il Riposo di Raffaele Borghini, in cui si favella della Pittura e della Scultura e de' più illustri Pittori et Scultori, antichie moderni*, Firenze, 1584, 4to., and 1730, 4to. *Discorso intorno alla Scultura e Pittura, di* Alessandro Lami, Cremona, 1584, 4to. *L'Idea de' Pittori, Scultori, e Architetti, del* Cav. Fed. Zuccaro, Torino, 1607, 4to. *Avvertimenti e Regole sopra l'Architettura civile e milit., la Pittura, Scultura, e Prospettiva, da* Pietro Ant. Barca, Milan, 1620, fol. *Le Pompe della Scultura, da* Giamb. Moroni, Ferrara, 1640, 12mo. *Trattato della Pittura e Scultura, uso ed abuso loro, composto da un Teologo* (Father Ottonelli), *e da un Pittore* (Pietro da Cortona), Firenze, 1652, 4to. *Discorso delle Statue, da* Giovanni Andrea Borboni, Rome, 1661, 4to. *Lettera, nella quale si risponde ad alcuni Quesiti di Pittura, Scultura*, &c. addressed to the Marquis V. Capponi, by Filippo Baldinucci, Rome, 1681. *Sfogamenti d'Ingegno sopra la Pittura e la Scultura, dal* P. F. Minozzi, Venice, 1739, 12mo. *Raccolta di Lettere sulla Pittura, Scultura, ed Architettura, scrette da più celebri Personnaggi che in dette Arti fiorirono dal* sec. xv. all. xvii. Rome, 1754, 4to. 7 vols. *Dialoghi sopra le tre Arti del Disegno*, by Giovanni Bottari, Lucca, 1754, 8vo.

In Spanish is the following:—*Varia Commensuracion para la Escultura y Architettura, por* Don Juan de Arphez Villafane, Madrid, 1675, 4to.

In the French tongue we find:—*Conférences de l'Académie Royale de Peinture et Sculpture pendant l'année* 1667, by Felibien, Paris, 1668, 4to. *Des Principes de l'Architecture, de la Sculpture, de la Peinture, et des Arts qui en dépendent*, by Felibien, Paris, 1697, 4to. *Sentimens des plus habiles Peintres, sur la Pratique de la Peinture et de la Sculpture, mis en table de Préceptes, avec plusieurs Discours académiques*, by Henri Testelin, Paris, 1680, folio. *Traité des Statues*, by F. Lemée, Paris, 1688, 8vo. *Manuscrit pour connoître les Médailles et les Statues anciennes*, by Nicolas de Porcionaro, and four of the most famous and learned antiquaries of Italy, Naples, 1713, 4to. *De la Sculpture, du Talent qu'elle demande, et de l'Art des Basreliefs*, by Dubos, to be found in the 50th chap. of the 1st part of his *Réflexions critiques sur la Poésie et sur la Peinture*;—*Discours sur le Beau Idéal des Peintres, Sculpteurs, et Poëtes*, by L. H. Ten-Kate, included in a translation of Richardson's Works, Amst. 1728, 8vo. *Lettre sur la Peinture, Sculpture, et Architecture*, Amst. 1749, 8vo. *Essai sur la Peinture, Sculpture, et Architecture*, by L. P. de Bachaumont, Paris, 1731, 12mo. In the 29th vol. of *Mémoires de l'Académie des Inscriptions* is a Memoir of the Comte de Caylus, *sur un Moyen d'incorporer la Couleur dans le Marbre, et de fixer le Trait. Réflexions sur la Sculpture*, by E. Falconet, Paris, 1761, 12mo. *Nouveaux Sujets de Peinture et de Sculpture*, Paris, 1755, 12mo. *Essai sur la Sculpture*, to be found with the *Traité de Peinture* of Dandré Bardon, Paris, 1765, 2 vols. 12mo. *Histoire Universelle, traitée relativement aux Arts de Peindre et de Sculpter*, Paris, 1769, 2 vols. 12mo. *Ichnographie, ou Discours sur les quatre Arts d'Architecture, Peinture, Sculpture, et Gravure, avec des Notes historiques, cosmographiques, chronologiques, généalogiques, et Monogrammes, Chiffres, Lettres initiales, Logogriphes*, &c. by M. Herbert, Paris, 1767, 5 vols. 12mo. *De l'Usage des Statues chez les Anciens, Essai historique,*

Brussels, 1768, 4to. with prints. (The Comte de GUASCO is the author of this work). *Lettre sur la Sculpture à M. Théodore de Smeth*, by M. HEMSTERHUIS the younger, Amst. 1768, 4to. with engravings. *Observations historiques et critiques sur les Erreurs des Peintres, Sculpteurs, &c. dans la Représentation des Sujets tirés de l'Histoire-sainte, avec des Eclaircissemens pour les rendre plus exactes*, Paris, 1771, 12mo. In the *Cours d'Architecture de* F. BLONDEL, (Paris, 1771), we find a *Mémoire sur l'Origine de la Sculpture.*

The following also may be cited as conveying information with respect to the execution of various works of sculpture: *Discours sur la Statue Equestre de Frédéric Guillaume érigée sur le Pont-Neuf à Berlin*, by C. ANCILLON, Berlin, 1703, fol. *Description de ce qui a été pratiqué pour fondre d'un seul jet la Statue Equestre de Louis XIV. en* 1699, by G. BOFFRAND, Paris, 1743, fol. *Description des Travaux qui ont précédé, accompagné et suivi la Fonte en bronze, d'un seul jet, de la Statue Equestre de Louis XV.* Paris, 1768, fol. *Description de la Statue Equestre que la Compagnie des Indes Orientales, à Copenhague, a consacrée à la Gloire de Frédéric V., avec les explications des motifs qui ont déterminé le choix des différentes parties qu'on a suivi dans la composition de ce monument*, by J. F. J. SAILLY, Copenhagen, 1771, fol.

In German:—Joachim de SANDRART, *Admiranda Artis Statuariæ*, Nor. 1680, fol. *Summary of the History and Principles of the Fine Arts and Sciences*, the first division of which relates to the history and principles of sculpture, Berlin, 1772, 8vo. by A. F. BUSCHING. *Sketch of a History of the Arts of Design*, Hamburgh, 1781, 8vo. by the same. *Philosophy of Sculptors*, by E. L. HUCH, Brandenburgh, 1775, 8vo. The 5th and 6th chapters of the *Treatise on Literature and the Works of Art of Antiquity*, by J. F. CHRIST, Leipsic, 1776, 8vo. *Treatise on the Plastic Art, including sundry Observations on Form and Figure*, Riga, 1778. In the 1st vol. of an *Essay on an Academy of Fine Arts*, by C. F. FRANCEN, we find a treatise on the mechanism of sculpture. *Essay on a History of Sculpture among the Ancients*, by HORSTEFER, Vienna, 1778, 8vo: in addition to which the different works of WINCKELMANN may be consulted.

In our own language the works more particularly useful for reference are:—*A Letter on Poetry, Painting, and Sculpture*, by H. KING, London, 1765, 8vo. *Collection of Greek, Etruscan, and Roman Antiquities from the Hamilton Cabinet*, Naples, 1766, folio, which work contains a paper on *Expression* in Painting and Sculpture, as well as an *Historical Summary on the State of Sculpture among the Greeks.*

The following books treat of certain monuments of antique sculpture in particular.—CALLISTRATI, Ἐκφράσεις, *sive Descriptio Statuarium*, found among the works of PHILOSTRATES. *The Description of Greece*, by PAUSANIAS, and the 33d and 37th books of PLINY'S *Natural History.* Several *Mémoires* of the Comte de CAYLUS on passages of Pliny relative to objects of art, are inserted in the 19th, 25th, and 32d vols. of *Mémoires de l'Académie des Inscriptions et Belles Lettres.* Edmundi FIGRELLII, *De Statuis illustrium Romanorum, liber singularis*, Holmiæ, 1656, 8vo. Joannes Henrici SCHLEMMII, *De Imaginibus Veterum Atriensibus Prælim. et cubicularis Dissertatio*, Jena, 1664, 4to. Frederici MULLERI, *delineat lib. xi. quos molitus est de Statuis Romanorum et præcipue de Natura Statuarium quibus prisci Romani bene meritos honorabant*, Giessæ, 1664, 4to. Joannis NICOLAI, *Diatribe de Mercuriis et Hermis*, Francofurti, 1701, 12mo. Chr. Gottfr. BARTHII, *De Imaginibus Veterum in Bibliothecis vel alibi positis*, Hallæ, 1702, 4to. Jacobi GRONOVII, *De Imaginibus et Statuis principum Dissertatio*, Ludg. Bat. 1706, 4to. J. MUNCHII, *De Statuis Veterum Romanorum Dissertatio*, Hafniæ, 1714, 4to. F. G. FREYTAGII, *De Statuis Τετελεσμεναις Veterum Dissertatio*, Lip. 1715, 4to. *Oratorum et Rhetorum Græcorum, quibus Statuæ honoris causa positæ fuerunt, decas*, Lips. 1752, 8vo. by the same. G. G. BŒRNERI, *De Statuis Achilleis Dissertatio.* Lips. 1759, 4to.

With respect to sculpture, as practised by the moderns, the reader is referred to:—*Cabinet des Singularités d'Architecture, Peinture, Sculpture, et Gravure*, by F. Le COMTE, Paris, 1699, 3 vols. 12mo. *Catalogue historique du Cabinet de Sculpture Française de* M. de la LIVE DE JULY, Paris, 1761, 12mo. *Monumens érigés en France à la Gloire de Louis XIV. précédés d'un Tableaux du Progrès des Arts et des Sciences sur ce Règne, ainsi que d'une Description des Honneurs et des Monumens accordés aux grands Hommes, tant chez les Anciens que chez les Modernes, et suivis d'un Choix des principaux Projets qui ont été proposés pour placer la Statue du Roi*, by M. PATTE, Paris, 1765, fol. with 57 plates. *Antiquités Nationales, ou Recueil de Monumens pour servir à l'Histoire de l'Empire Français, tels que Tombeaux, Inscriptions, Statues, Vitraux,*

Frescoes, &c. tirés des Abbayes, Monastères, et Châteaux, by A. L. MILLIN, Paris, 1791, 5 vols. 4to. and fol. with plates.

A catalogue of ancient sculptors is to be found in the 2d edit. of *De Pictura Veterum*, by JUNIUS, Rot. 1694, fol. whilst the following treat of modern Italian sculptors:—*Vite de' più insigni Pittori e Scultori Ferraresi*, by G. BARUFFALDI, Ferrara, 1705, 4to. *Notizie intorno alla Vita ed alle Opere de' Pittori, Scultori ed intagl. di Bassana*, by G. VERCI, Bass. 1775, 8vo. *Catal. Istoriche de Pittori ed Scultori Ferraresi, e dell' loro Opere*, Ferrara, 1783, 2 vols. 8vo.

On modern Spanish sculptors, independently of the work by Bermudez, already quoted (see preceding article), we have:—*Vidas de los Pintores y Estatuarios eminentes Espagnoles*, by D. A. P. VELASCO, London, 1742, 8vo. and (in French) Paris, 1749, 12mo. This forms the third part of the same author's *Museo Pittorici*, Madrid, 1725, fol.

On German sculptors:—J. C. SCHUMANN, *Alcimedon, or Lives of the most celebrated German Sculptors and Engravers*, Dresden, 1684, 8vo. *History of the best Swiss Artists*, by J. C. FUSSLI, Zurich, 1780, 5 vols. 8vo. *Notices of sundry Artists of Frankfort, of the Life and Works of its Painters and Sculptors*, by HUSGEN, Frankfort, 1780, 8vo. Several papers on the same subject are likewise to be found in the *Journal of Arts* of M. de MURR, and in that of MEUSEL.

SCUTULÆ. See PHALANGÆ.

SCYPHATI. [Lat. from Gr. σκυφος, a glass or cup.] *In archaiology.* Towards the latter period of the Western empire, golden medals were struck concave on one side and convex on the other. These were denominated *nummi scyphati*, from their resemblance to the shape of a cup.

SEAL. [ȝiȝel, Saxon.] *In gem sculpture.* A stamp engraved with a particular impression, fixed upon the wax that closes letters, or affixed to any document as a testimony. The chief use to be derived from a consideration of the present subject arises from the light which it is calculated to throw on the manners and usages of our ancestors, as well as on the historical facts concerning them. The term is, properly speaking, applicable only to the instrument itself, but is commonly employed when speaking of the impression produced. The use of rings appears to have preceded that of seals. These latter have been engraved on all sorts of substances—metals, precious stones, glass, ivory, &c. The subject matter which has received the impression has itself varied equally. Chalk, wax, plaster, &c. have by turns been put in requisition for this purpose. The French kings, copying the Roman potentates, sealed with wax; that called Spanish wax, a mixture of gum-lac, resin, chalk, and cinnabar, was invented nearly two centuries since, by a Parisian merchant of the name of Rousseau. The colour of impressions of seals has likewise varied considerably. That sort of wax most anciently used was white. The employment of yellow wax on public documents obtained a good deal about the twelfth century. Ultimately, however, red wax became preferred in almost all the European countries, and remains so at the present moment. The Western patriarchs and emperors sealed in green wax certain letters to persons of distinction. This usage was adopted in the twelfth century in France, and at a date somewhat subsequent introduced into Germany. Specimens of this variety are, however, extremely rare. In our own country, the green seal is still occasionally used on charters. The Emperor Charles V., in 1524, accorded the privilege of sealing in blue, but the example is unique of the employment of that colour among European potentates. Certain princes have, at different times, adopted black wax to seal withal; as, for instance, Jeremy, patriarch of Constantinople, and, since his time, the Grand Master of the Teutonic Order in Prussia. In the thirteenth century it was employed in France. Impressions are also found in mixed wax—i. e. of different colours. Seals vary, besides, in size and shape; they are sometimes large, sometimes small, square, round, long, trefoil, lozenge, &c.

The most curious circumstance connected with the study of seals, however, is the symbol or inscription engraved on them; and, in this point of view, their value is as great to the antiquarian or historian as medals themselves. They frequently serve to fix disputed dates, genealogies, &c. The round form is the simplest and most ancient, and has been particularly appropriated to metal seals. The oval shape is also of early date. They were subsequently shaped ogivelike, which mode was peculiar to ecclesiastics.

Being unable to give, in this brief notice, any thing more than a general idea on the subject, we will add a list of those works which appear to treat of it in the most intelligent manner:—*De Subscribendis et Subsignandis Testamentis, et de Antiquorum et hodiernorum Sigillorum Differentia*,

Austore Claud. Salmasio, Lugd. Batav. 1653, 8vo. Theod. Hoepinck, *De Jure Sigillorum*, Norimb. 1642, 4to. H. G. Thulemarius, *De Bulla aurea, argentea, plumbea, et cerea*, Heidelb. 1687 and 1724, fol. Joan. Michael. Heineccii, *De Veteribus Germanorum aliarumque Nationum Sigillis, eorumque usu et præstantia, syntagma historicum: accedunt Sigillorum icones*, Lips. 1719. Muratori, *De Sigillis medii Ævi*, in the 3d vol. of *Antiquitates Italicæ Dissert.* 35. Dom. Maria Manni, *Osservazioni Istoriche sopra i Sigilli antichi de'* Jac. Bassi, Firenz. 1786. Adam Frid. Glafey, *Specimen decadem Sigillorum complectens, quibus historiam Italiæ, Galliæ, atque Germaniæ illustrat.* Lips. 1749, 4to. *Dictionnaire Raisonné de Diplomatique*, &c. &c. by Dom. de Vaines, Benedictine, Paris, 1774, 2 vols. 8vo. *Recueil de Sceaux du moyen Age, dits Sceaux Gothiques*, Paris, 1779, 4to. J. Beckmann, *Des Sceaux, et sur la Manière de Sceller*; (to be found in his *Supplemens à l'Histoire des Inventions*). *Remarques sur les Sceaux pédestres*, by Praun, Brunswick, 1779, 4to. *Observations sur les Sceaux et sur les Cordons attachés aux Sceaux*, by Will, found amongst his *Supplémens à la Diplomatique*, Altdorf, 1789, 8vo. *Observations on Seals*, by G. P. Gherchen, Augsburgh, 1781. *Antiquités Nationales, ou Recueil de Monumens, pour servir à l'Histoire de l'Empire Français*, &c. &c. by A. L. Millin, 4 vols. art. 49, 17th and following pages, in the folio edition of 1792. Polycarp. Leyser, *De Contra Sigillis medii Ævi*, Ilmstadt, 1728, 4to.

Seapiece. *In painting.* A representation of the different aspects of the ocean, together with any accidental circumstances connected therewith, such as a naval action, &c.

Seasons. [Fr. *saison.*] *In emblematical painting and sculpture.* The seasons are all represented as persons, as well by artists as poets. They are frequently seen all together on rilievi, medals, and gems. Thus, on a medal of Commodus, they appear moving over a celestial globe, which lies by the goddess Tellus. The artists have also followed the poets in expressing the four ages of life by depicting *Ver* (Spring) as infantile and tender; *Æstas* (Summer) as young and sprightly; *Autumnus* (Autumn) mature and manly; and *Hyems* (Winter) old and decrepid. (See Ovid, Met. xv. 213.)

Thus, again, Ver is a youth marked out generally by the coronet of flowers on his head, or the basket of flowers in his hand. Æstas is crowned with corn, or holds a sickle in his hand. Autumnus is usually distinguished by his crown of different fruits; and Hyems by his crown of reeds, by the birds in his hand, or the beast at his feet; and by his being warmly clothed whilst the others are naked.

Dies, or the Day, was looked on as a divinity, and represented sometimes, like Sol, in a chariot: and *Nox*, or the Night, is more distinctly mentioned in a personal character. She is crowned with poppies, and perhaps sometimes with stars. Her appearance has something venerable and majestic; she has large, dark wings, and a long robe. She is represented as riding in a chariot drawn by two black horses, and every part of her stage is described by some poet or other.

The beginning of daybreak was probably characterised under the person of *Phosphorus;* as the time from thence to sunrising belonged to *Aurora*, or the Morning (see Aurora), who is variously described, though without confusion. If we may judge by the poets, her complexion was suited by the painters to the occasion. It was sometimes of a lively red, sometimes pale, and sometimes more or less brown, according to the sort of morning they intended to represent. Her skin was like that of Apelles's *Venus*, with such a humid cast. Her robe was of a pale bright yellow, and she held a whip or torch in her hand. Her chariot was of a fine rose colour, with pearls of dew upon it, and the horses were cream coloured or strawberry.

Hesperus, or the Evening, is the same with Phosphorus, or Lucifer, only having different attributes. The poets give him a black horse as Hesperus, and as Phosphorus a white one. The artists distinguish him by a torch when they make him the forerunner of Sol.

The *Horæ*, or Hours, are represented by the poets in fine coloured or embroidered robes, gliding on with a quick and easy motion. Ovid mentions them as standing at equal distances about the throne of Sol. Others make them attend that deity at his setting out, or at his coming in. All agree in describing them as attendants of Sol; and therefore it was that some of them were always stationed with Janus at the gate of heaven, as ready to accompany the chariot of Sol in his daily course.

This gliding motion is attributed to all the deities presiding over any part of time. There is a known *rilievo* at Rome, the figures whereof have been taken only for

so many ladies dancing for their own diversion: but more accurate observers have imagined them, from their position and attitudes, to express the *Horæ*. The hands of these figures are mutually joined; they are placed in a straight line; some seem coming towards, and others going from you; and they stand at equal distances: all which agrees with the manner in which the hours should be represented.

Janus, alluded to above, presided over the gates of heaven, and was therefore represented sometimes with a staff in one hand and a key in the other. When supplications were made to any god, Janus was first invoked, since it was he who was to give access to the prayers, even to Jupiter. He was considered as the most ancient of beings, and as comprehending the whole universe. Possibly, in their most secret mythology, they might mean space by this deity. An open arch, or indeed any opening, was called Janus; as the opening to a house was named *Janua*. As this shows his relation to space, so his including all things shows his relation to infinite space.

Janus is distinguished by his double form. He had sometimes two, and sometimes even four bodies given him. Hence, he is denominated Geminus; and hence Statius, in a somewhat ridiculous description, makes Janus lift up all his hands, and speak with all his mouths at once. (Stat. iv. Sylv. i. v. 20.) There is a bust of Janus Quadriformis on a bridge at Rome, from whence the place is called *Quatre Capite*. In some figures of him on medals, he has but one body with four heads. Under this sort of figure, which looks every way, they meant, perhaps, to express his presiding over space: as his figures with two faces, one looking backward and the other forward, might denote his presiding over time. As the beginning of the year was under the disposition of Janus, so the entrance into the consulship was, of course, under his protection. This is frequently alluded to by the artists; and hence he has, in some figures, the consular fasces in his hands. His busts, with two faces, are very common; especially on the medals which have the double head of Janus on one side, and part of a ship on the other. These were so very old that, in Ovid's time, the figures were almost worn out with age. (Fast. i. v. 235.) Their number now makes them not much valued. Were there but one left, it would doubtless be deemed as great a treasure as an Otho; especially as they are so much talked of by the poets, from whom it may be proved that the Roman children played with them at *heads* or *ships* as ours do now at *cross* or *pile*. (Macrob. Saturn. l. ii. c. 7.)

The faces of Janus, in all the antiques, are both alike, and both old; and yet some moderns, even in Italy, give Janus a young and an old face. His presiding over peace and war had no relation to his mythological character as the god of space or time, but was wholly founded on an old Roman legend.

The *Months* are likewise personified both by poets and artists. December, particularly, is depicted in a drunken attitude; as some explanation of which it will be recollected that the Saturnalia were then celebrated; and it must be confessed that, under Christian usages, the old charter of the month does not seem likely to be lost. It has been already observed, that the heathen deity Janus was held to preside over the opening or gate of the year; and hence the first month therein is called *January*.

The Greek months were named after different festivals in honour of the gods, as the present one, for instance, Anthesterion or the Flowery—from the quantity of flowers displayed at the festival of Bacchus.

The modern use of ancient terms on accasions of this kind produces some amusing inconsistencies, especially among the Celtic nations. Thus, in our House of Commons, there shall be a call of the members for Wednesday, or the day of the gothic deity Woden, which their Journal translates into Dies Martis, or the day of the Roman deity Mars; and this day of Gothic and Roman divinityship is commenced with the reading of Christian prayers.

We shall here give from that fruitful offspring of Spenser's imagination, the *Faery Queene*, a poetical list of the twelve months; in which the personifications of each, often very happy and ingenious, may afford many a hint to the student or amateur of the Fine Arts.

> Then came old January, wrapped well
> In many weeds to keep the cold away;
> Yet did he quake and quiver like to quell;
> And blowe his nayles to warme them if he may;
> For they were numb'd with holding all the day
> An hatchet keene, with which he felled wood,
> And from the trees did lop the needlesse spray;
> Upon a huge great earthpot steene he stood,
> From whose wide mouth there flowed forth the Romane flood. Book vii. Canto 7.

February is so called from the Roman custom of burning expiatory sacrifices, Februalia.

.... Then came cold February, sitting
In an old waggon, for he could not ride,
Drawne of two fishes for the season fitting,
Which through the flood before did softly slyde
And swim away; yet had he by his side
His plough and harnesse fit to till the ground,
And tooles to prune the trees, before the pride
Of hasting prime did make them burgeon round.

March, which was the *first* month in antiquity, was so named by the Romans, after Mars the god of war, because he was the father of their first prince. This, at least, is the reason given by Ovid. As to the deity's nature, March has certainly nothing in common with it; for though it affects to be very rough, it is one of the best natured months in the year, drying up the superabundant moisture of winter with its fierce winds, and thus restoring us our paths through the fields, and piping before the flowers like a bacchanal.

—Sturdy March, with brows full sternly bent
And armed strongly, rode upon a ram;
The same which over Hellespontus swam;
Yet in his hand a spade he also hent,
And in a bag all sorts of seeds ysame,
Which on the earth he strewed as he went,
And fill'd her womb with fruitfull hope of nourishment.

April is so called from the Latin *Aprilis*, which is derived from the word *Aperire*, to *open*. The allusion is obvious.

Next came fresh April, full of lusteyhed,
And wanton as a kid whose horne new buds;
Upon a bull he rode, the same which led
Europa floting through the' Argolick floods:
His horns were gilden all with golden studs,
And garnished with garlands goodly dight
Of all the fairest flowers and freshest buds
Which th' earth brings forth; and wet he seem'd in sight
With waves, through which he waded for his love's delight.

May is so called from the goddess Maia, a name under which the earth was worshiped at this *dedal* season of the year. May is the month spoken of with the greatest rapture in all the polite countries of Europe, though the Englishman is sometimes at a loss to perceive why.

Then came faire May, the fayrest Mayd on ground,
Deck't all with daintes of her season's payde,
And throwing flowres out of her lap around:
Upon two brethrens shoulders she did ride,
The twinnes of Leda; which on either side
Supported her like to their soveraine queene;
Lord! how all creatures laught when her they spide,
And leapt and danne't as they had ravisht beene!
And Cupid self about her fluttered all in greene.

The name of June (and indeed that of May), gave rise to various etymologies; but the most probable one derives it from Juno, in honour of whom a festival was celebrated at the beginning of the month.

Spenser is not so happy as usual in his description of this month, but has wasted his stanza on the sign of the Zodiac. The allusion at the end is supposed to be aimed at the Puritans, who were then just beginning to poison all our natural enjoyments; but it seems obviously to point to the description of the hypocritical pretenders to prophecy in Dante, whose faces looked behind instead of before them.

And after her came jolly June, array'd
All in green leaves, as he a player were;
Yet in his time he wrought as well as play'd,
That by his plough-irons mote rite well appeare.
Upon a crab he rode, that him did bare
With crooked crawling steps an uncouth pase,
And backward-yode, as bargemen wont to fare,
Bending their force contrary to their face;
Like that ungracious crew which faines demurest grace.

July is so called after Julius Cæsar, who contrived to divide his names between months and dynasties, and among his better deeds of ambition reformed the calendar.

Then came hot July, boiling like to fire,
That all his garments he had cast away.
Upon a lyon raging yet with ire
He boldly rode, and made him to obey:
(It was the beast that whilom did forray
The Nemæan forest, till the Amphitrionide
Him slew, and with his hide did him array:)
Behind his backe a sithe, and by his side
Under his belt he bore a sickle circling wide.

August is so named from Augustus, a clever man of the world, who, partly by chance, and partly by foolish political hopelessness, was allowed to become master of it. The Romans originally called July and August Quintilis and Sextilis, or fifth and sixth months, dating from the old yearly commencement of March; September, October, November, and December, meant the seventh, eighth, ninth, and tenth months accordingly.

Admire the deep beauty of this allegorical picture. Spenser takes advantage of the sign of the Zodiac, the Virgin, to convert her into Astrea, the goddess of justice, who seems to return to earth awhile, when the exuberance of the season presents enough for all.

The eighth was August, being rich array'd
In garment all of gold downe to the ground:
Yet rode he not, but led a lovely mayd
Forth by the lilly hand, the which was crown'd
With eares of corn, and full her hand was found.
That was the righteous Virgin, which of old
Liv'd here on earth, and plenty made abound;
But after wrong was lov'd, and justice solde,
She left th' unrighteous world, and was to heav'n extol'd.

The poet still takes advantage of the exuberance of harvest and the sign of the Zodiac in the next month, to read us a lesson on justice.

Next him September marched eke on foot;
Yet was he heavy laden with the spoyle
Of harvest's riches, which he made his boot,
And him enriched with bounty of the soyle:
In his one hand, as fit for harvest's toyle,
He held a knife-hook; and in th' other hand
A paire of weights, with which he did assoyle
Both more and lesse, where it in doubt did stand,
And equal gave to each as justice duly scanned.

Then came October, full of merry glee,
For yet his nowle was totty of the must,
Which he was treading, in the wine-fat's see,
And of the joyous oyle, whose gentle gust
Made him so frolic and so full of lust.
Upon a dreadful Scorpion he did ride,
The same which by Dianae's doom unjust
Slew great Orion; and eeke by his side
He had his ploughing-share and coulter ready tyde.

Next was November; he full grown and fat
As fed with lard, and that right well might seeme;
For he had been a fatting hogs of late,
That yet his browes with sweat did reek and steam;
And yet the season was full sharp and breem;
In planting eeke he took no small delight,
Whereon he rode, not easie was to deeme;
For it a dreadful centaure was in sight,
The seed of Saturn and fair Nais, Chiron hight.

And after him came next the chill December;
Yet he, through merry feasting which he made
And great bonfires, did not the cold remember;
His Saviour's birth so much his mind did glad.
Upon a shaggy bearded goat he rode,
The same wherewith Dan Jove in tender years,
They say was nourisht by the Idœan mayd;
And in his hand a broad deep bowle he bears,
Of which he freely drinks an health to all his peeres.

SEAT. [*sett*, old German.] *In architecture and joinery.* The name of any thing serving as a resting place or chair. We often find depicted on ancient monuments sundry specimens of this useful article. The *subsellium* was a seat peculiar to heroic personages and to kings. The Roman magistrates were commonly seated on the *curule chair*, a sort of bench. The *sella curulis* is principally remarked on medals of the Lollia, Cornelia, and Cestia families; while those of the Sulpicia and Critonia families are adorned with the kind of benches appropriated to the quæstors, ædiles, and inferior magistrates generally.

The arrangement of seats in the Greek and Roman theatres was subjected to particular rules; it was not permitted for each spectator to place himself where he chose; but the different classes of citizens had different seats assigned to them.

SECLUSORIUM. [Lat. from *se*, which denotes separation, and *claudo*, to shut up.] *In archaiology.* In the large aviaries which the wealthy Romans established in their villas, an apartment was set aside under the title of the *seclusorium*, wherein birds were confined for the purpose of being sold or killed.

SECTION. [Lat. *sectio*, from *seco*, to divide.] *In architectural drawings*, the word *section* is applied to the view of an edifice cut down the middle for the purpose of exhibiting the interior and describing the height, breadth, thickness of wall, arches, domes, &c. The drawings relative to an architectural work cannot be said to be complete, unless they comprise plan, elevation, and section. The terms SCIAGRAPHY and PROFILE (see those words) are occasionally substituted for *section*.

SECULAR GAMES. [Lat. *secularis*, from *seculum*, a hundred years.] *In archaiology.* These celebrated games were held, as their name implies, but once in the space of a century. They lasted three days, and as many nights; and throughout this period, sacrifices were performed, theatrical shows exhibited, with sports, combats, &c. in the Circus. Valerius Maximus, Zosimus, and the ancient authors, ascribe their origin to the following cause.

In the earliest times of the Roman state, a rich man named Valesius, who dwelt at his country house in the Sabine territory, had several of his children attacked by the plague; and, to procure their recovery, was commanded by his household gods to take them down the Tiber to a place called Tarentum, and there to make them drink water heated on the altar of Pluto and Proserpine. The orders of these sage deities were complied with, and the children recovered; whilst in token of his gratitude the father offered sacrifices and *lectisternia;* put sumptuous clothes on the accommodating little *lares*, and, in conclusion, instituted games of rejoicing. The practice, however, did not spread until, in the year of Rome 245, Valerius Publicola followed the example of the Sabine citizen, on a similar occasion, namely, to check the progress of an infectious disease.

The solemnity was as follows:—The whole world was invited by a herald to a feast such as they had never before witnessed, nor would ever see repeated. Some days before the games began, the *quindecemviri* in the Capitol and the Palatine Temple distributed among the people purifying compositions of different sorts, such, for instance, as sulphur, flambeaux, &c. From hence the populace passed to Diana's Temple on the Aventine Mount, with barley, wheat, and oats, by way of offering. Entire nights were afterwards spent in devotion to the destinies.

When the time of the games was fully arrived, the people assembled in the Campus Martius, and sacrificed to Jupiter,

Juno, Apollo, Latona, Diana, the Parcæ, Ceres—and, though last not least, to Pluto and Proserpine. On the first night of the festival, the emperor, with the quindecemviri, caused three altars to be erected on the banks of the Tiber, which having sprinkled with the blood of three lambs, they proceeded to regular sacrifice. A space being next marked out for a theatre, was illuminated with countless fires and flambeaux. Here hymns were chanted, and all descriptions of sports celebrated. On the succeeding day, having offered victims at the Capitol, they repaired to the Campus Martius, and engaged in sports to the honour of Apollo and Diana. These lasted till next day, when the noble matrons, at the hour appointed by the oracle, went to the Capitol to sing hymns to Jupiter. On the third and last day (which concluded the solemnity), twenty-seven boys and as many girls sung in the temple of Palatine Apollo verses and hymns, in Greek and Latin, to recommend the city to the protection of those deities to whose especial honour their sacrifices were devoted.

The matchless *Carmen Seculare* of Horace was composed for this last day, in the secular games held by Augustus.

Much diversity of opinion has obtained with reference to the question, whether these games were held every hundred or every hundred and ten years. Valerius Antius, Varro, and Livy are all quoted in support of the former opinion: whilst, in favour of the latter may be urged the quindecemviral registers, the edicts of Augustus, and the words of Horace in the *Carmen*—"*Ludus undenos decies per annos.*"

A general belief obtained that the girls who bore a part in the song should be soonest married; and that those children who did not dance and sing at the coming of Apollo should die unmarried, and at an early period of life.

On this interesting subject an acquaintance with which cannot fail to be useful to the artistical student, he is referred, for further information, to the following works:—The *Sybilline Verses*, which Zosimus has preserved to us in his 2d book; together with those handed down by Philegon, in the 4th chapter of his work *On the Great Men who flourished long since.* Angelus Politianus has translated these very elegantly into Latin verse in the 58th chapter of his *Miscellanea.* We may compare with the above what has been said by the commentators on the 35th poem of Catullus, entitled *Carmen Seculare ad Dianam*, as well as the *Carmen Seculare* of Horace, and the 21st ode of his first, and 6th ode of his 4th book. Details respecting the secular games are also to be met with in Festus, at the words *sæculares ludi*; in Valerius Maximus, 2d book and chap. 4th; in the work of Censorinus, *De Die Natali*, chap. 17; in the 18th chap. of the 3d book of St. Augustine's work, *De Civitate Dei;* and in the 1st and 2d odes *Ad Quirinum* of Metellus, surnamed Tegerensénsis.

Among writers of a later date we may cite:—Joseph Scaliger, in the 2d book of *Emendatione Temporum.* Onuphrius Panvinius, in his work *De Seculariibus Ludis*, found at the end of his Fasti, Venice, 1558, Heid. (same date), fol. In the 1st vol. of the *Miscellanea* of Gaudentius Robertus; and the 11th of the *Tresor* of Grævius.—P. Taffinus, *De Anno Seculari et Ludis Secularibus Romanorum*, Tournai, 1641, 4to., and in the 8th vol. of the *Tresor* of Grævius, which work was composed on occasion of the secular festival of the Order of the Jesuits. Spanheim, in the 9th *Dissertation* of his work *De Usu et Præstantia Numismatum.* J. Champinus, *Sacra historica Disquisitio de duobus Emblematibus in Cimelio Cardinalis Carpinei asservati, ubi disputatur, an duo Philippi Imperatores fuerint Christiani?* Just. Ryequius, *Syntagma de Anno Sæculari, Jubilæo, et Annis solemnibus diversarum Nationum*, Ant. 1625, 8vo. J. A. Turretinus, *Academicæ Questiones de Ludis Secularibus*, Geneva, 1701, 4to. Florent. de Bruin, *Eeuw-Spelen der oude Romeynen*, &c. Amst. 1703, 8vo. P. Rainssant, *Dissertation sur douze Médailles de Jeux Séculaires de l'Empereur Domitian*, Versailles, 1684, 4to. A *Dissertation*, by an anonymous author, upon two Roman medals, Paris, 1701. Galland, *Extrait d'une Lettre sur la Médaille de Gratien, dans laquelle il est parlé d'un commencement de siècle dans les Mémoires de Trévoux*, 1701. Harduini, *Dissertatio de Nummo Gratiani, cum Epigraphe*:—Gloria Novi Sæculi, in his *Opera Selecta*, p. 503. Harduin, *Extrait d'une Dissertation Latine sur deux Médailles de Gratien, sur l'une des quelles il est parlé d'un commencement de siècle, et peut-être d'un siècle de l'ère Chrétienne*, in the *Mémoires de Trévoux*, 1701, p. 131. Leibnitz, *Diss. de Nummis, in quibus hinc Gratianus dicitur AVG. G. AVG. inde autem commentatur* Gloria Novi Sæculi, in the *Electa* of Wolterock, p. 308. *Lettre touchant l'Explication du* P. Harduin, *de la Médaille de Gratien dans laquelle il est parle d'un commencement de siècle*, in the *Mémoires de Trevoux*, 1701. Boussac, *Notes Theologicæ*, the 6th of

which treats of the subject before us. J. M. Gesner, *Commentatio de Annis Ludisque Sæcularibus Veterum Romanorum*, Vin. 1717. *Dissertatio de Opinatis Sæcularium Ludorum Notis in Nummis Romanorum Sæcularibus*, by the same, Gottingen, 1745, 4to. Ayrmann, *De Ludis Romanorum Sæcularibus*, Wittemb. 1717. C. G. Schwartz, *De Ludis Sæcularibus, sub Philippis Augustis*, Alt. 1723. J. A. M. Nagel, *De Ludis Sæcularibus Veterum Romanorum in Gemara Babylonica Commemoratis*, Alt. 1743.

Semicircle. [Lat. from *semi*, half, and *circulus*, a circle.] *In geometry.* A half round: part of a circle divided by the diameter.

Senaria. [Lat.] *In ancient architecture.* Name applied by the Romans to those pipes or tunnels, in their aqueducts, the diameter of which was an inch and a half, or six quarters; when the diameter was seven quarters of an inch they were denominated *septenaria;* and the proportion increased to the *vicenaria*, so called from its measuring twenty quarters, or five inches. See Aqueduct.

Sentiment. [Fr.] *In painting and sculpture.* The evidence in his work of feeling and sensibility in the mind and perceptions of the artist. This quality may be almost identified with *Expression* (which word see).

Septa. [Lat.] See Ovile.

Septizonium. [Lat.] *In ancient architecture.* The mausoleum which Septimius Severus caused to be erected at Rome for himself and family. It was a large building, square in plan, and with seven ranges of columns, forming a pyramidal figure, and all surmounted by the statue of Septimius. It was constructed at the foot of the Palatine Mount. Besides this new *septizonium*, there was one more ancient, which was in the tenth quarter of the city.

Sepulchral Arch. An arch, supported by columns, and erected over a tomb, with an inscription on its base, or on the shafts of the columns.

Sepulchre. [Lat. *sepulchrum.*] *In architecture.* See Tomb.

Serapeum. [Lat.] *In archaiology.* A temple of Serapis, the Egyptian deity. The most famous of these edifices was that at Alexandria. Rufinus, who witnessed it while standing, has left us the following description. "This vast mass of building is square, and forms an immense platform, supported on aches, and upon which stands the temple itself. The vaults of the platform are separated into a great number of different apartments, which afford lodging to the priests and attendants; and around are refectories, council chambers, &c. The temple itself is adorned with columns, and has walls of marble."

Ptolemy, the son of Lagus, had built this *serapeum* on a spot by which, for a long time before, had stood a chapel consecrated to Serapis and Isis. Both this and the new temple, however, were destroyed by order of the Christian Emperor Theodosius.

The statue of Serapis, according to Macrobius, was of a human form, with a basket or bushel on his head, signifying plenty. His right hand leaned on the head of a serpent, whose body was wound round a figure with three heads—of a dog, a lion, and a wolf. In his left hand he held a measure of a cubit length, as it were, to take the height of the waters of the Nile. This celebrated statue was destroyed with the temple; its limbs first carried in triumph through the city, and then thrown by the meek Christians into a fierce fire kindled for that purpose in the amphitheatre. The figure of Serapis is found on many ancient medals.

Serpentine. [from *serpent.*] *In architecture, &c.* The species of stone commonly thus called is, according to Fabroni, a true *lapis ollaris;* but has its name from being variegated with green, yellowish, and brown spots, like the skin of some serpents. Great quantities of it are found in Italy and Switzerland, where it is frequently worked into dishes and other vessels. M. Magellan observes, however, that there is a very great variety of colour, as well as of composition, in this genus of earths.

Sewers. [*asseour*, old French.] *In architecture.* Underground gutters or channels constructed to receive and carry off the superabundant water, as well as the ordure of a town.

The common sewers of Rome, which have been more or less imitated in the principal modern European cities, were, and still continue to be, almost among the wonders of the world. They are said to have originated with Tarquin the Elder, a prince whose territory did not exceed, in any direction, sixteen miles; and in this case must have been constructed for the accommodation of a city containing chiefly herdsmen with their cattle, or banditti. Now, although rude nations sometimes execute works of great magnificence, such as fortresses and temples, for the purposes of war or superstition, it is seldom that palaces, and still more seldom that works calculated to ensure comfort and cleanli-

ness attract their attention: it may, therefore, admit of rational doubt, whether or not tradition is correct in this particular. In fact, ingenious hypotheses have been started which tend to assign to these vast excavations an antiquity even more remote than the era of Romulus, and to imagine them the relics of a city which might have preceded Rome herself in the natural revolution of spendour and decay, and on the ruins of which the fugitive founders of that emporium of art might have settled, as the Arabs now hut or encamp on the ruins of Baalbec and Palmyra. Livy admits that the common sewers were not accommodated to the plan of Rome as it existed in his time: "they were carried in directions across the streets, and passed under buildings of the greatest antiquity." This derangement, it is true, he imputes to the hasty rebuilding of the city after its destruction by the Gauls: but, one would think, that the very circumstance of haste would have determined the people to adhere to their old sites; at all events, not to cross, to their inconvenience, the direction of former streets.

Leaving this question, however, in the hands of antiquarians of deeper research, we shall proceed to observe, that through the instrumentality of these stupendous and most useful works, the vast city of Rome, even in its most populous days, was preserved perfectly dry and free from the offensive effluvia sc common and so disgusting in various European towns. The common sewers, or *cloaca*, of Rome had, between the Capitoline, the Palatine, and the Quirinal hills, sundry branches which were all united in the Forum or *Campo Vaccino*, and emptied into the Tiber by one and the same canal, which was denominated *cloaca maxima*. In the times of the Republic, Cato the Censor and his colleague, Valerius Flaccus, caused these to be repaired, and new ones constructed in such quarters of the growing city as had not before possessed the advantage.

But the personage to whom the swarming population of ancient Rome was most deeply indebted in this matter was Agrippa, whose improvements and additions were so numerous that, according to the expression of Pliny, he built under Rome a navigable city. He is said to have turned the course of seven rivers into these subterraneous passages, and to have actually passed in barges under the streets and buildings of Rome. These immense works are still supposed to remain: but as it exceeds the power and resources of the modern government to keep them in repair they are, except in one or two places, quite concealed. It was usual, in the times of the Republic, when they became obstructed, for the censors to contract to pay the sum of a thousand talents (about £193,000), for cleansing and repairing them.

The common sewers of London, although not capable of vieing with the wonderful constructions abovementioned, are still very extensive and complete; and being kept in the best order, suffice to purify our vast metropolis, equal in size and population to Rome in her proudest days.

SFUMATO. [Italian, *smoky*.] *In painting*. This term is applied to the species of painting in which the tints are extremely smooth and blended, so as to present that sort of indefinite contour and outline displayed by natural appearances on a misty day, or at a considerable distance. This style, in the hands of a master, is very agreeable and harmonious. Perhaps Guercino has seized its true spirit better than any other artist of celebrity.

SGRAFFITO. [Italian.] *In painting*. A sort of fresco, but simpler in its execution, and better calculated to resist the injuries of the weather. This work should be performed by an able artist; since any line or contour once traced can never be obliterated.

SHADOW. [ꞅcaðu, Saxon.] *In painting, &c.* Shadow must not be confounded with obscurity; the latter being an entire *privation* of light, whilst the former is merely a *gradation* of it, the parties in shade being still radiated by the light dispersed through the air. According to Felibien, it may be regarded simply as a light cloud covering the bodies and depriving them of the stronger brilliancy without rendering their colours and shapes imperceptible. It is requisite, in a picture, that there should be different modifications of shadow, as operated on by situation and surrounding objects. The direction of the shades should be diagonal, and the effects triangular, like those of lights. The progression of the latter, in fact, should serve as a model for the former, to the end that the *chiaro-scuro* should be well and naturally balanced. See CHIARO-SCURO.

SHAFT. [ꞅceaꞅꞇ, Saxon.] *In architecture*. The trunk or body of a column between the base and the capital. See DIMINUTION, ENTASIS.

SHAPE. [ꞅcyphan, Saxon.] *In all the arts*. Form: external appearance. The word *shapely* is used when speaking of any object the proportions of which are elegant and harmonious.

SHIELD. [ꞅcylꝺ, Saxon.] *In military cos-*

tume. One of the most ancient articles of defensive warfare. Upon those *bassi rilievi* which represent subjects of an heroical nature, the heroes, otherwise naked, are generally supplied with buckler or shield, helmet, and sword. The shields of the earlier Greeks were woven of osiers, for which was afterwards substituted planks of light wood, and subsequently ox hides, frequently ornamented as well as rendered more solid with plates of metal. Withinside the shield had two handles, through which to pass the arm and hand. This instrument was of various shapes, according to the customs of different countries. Some wore it oval, some triangular, others round, others again crescent shaped. The modern shields, those, for instance, worn in the middle ages, and since, are chiefly circular or square, rounded and pointed at the bottom, and adorned with paintings illustrative of the name, rank, or disposition of the warrior to whom they belonged. Indeed, as the shield was one of the most important of warlike articles, its bearer always, even in remote ages, took care to have it embellished with some appropriate device. Hence the ancient poets were at great pains to be precise in describing with all imaginable detail the ornaments of their heroes' shields; and of these descriptions, the most celebrated are those of the shield of Achilles, by Homer, of Hercules, by Hesiod, and of Æneas, by Virgil. Among the Romans, each legion had shields of a particular colour, and adorned with peculiar symbols; to which were added distinctive signs, by means of which each individual soldier knew his own from another man's—a necessary precaution, since all were deposited together in the same tent or magazine. That soldier was held to be dishonoured who abandoned his shield. See DEVICE.

SHRINE. [ɾcɲɪn, Saxon.] *In sculpture and modelling.* A small chest or coffer, in which are deposited, on the altars of Roman Catholic churches, the relics of the saints, &c. See RELIQUARY.

SICYON. *In the history of the arts.* A town of Achaia, celebrated for the progress made by its inhabitants in painting and sculpture. Dædalus, so often spoken of by Pausanias, and the painter Eupompus, with many other famous names, drew their first breath in Sicyon, where Eupompus founded a numerous and able school. This city contained several fine buildings, and its reputation altogether, as regards the fine arts, is deservedly high.

The Sicyonians were, however, a luxurious and somewhat effeminate people. The shoes of the women were formed with peculiar elegance, and their make afterwards adopted in Rome.

SIGILLUM. [Lat. diminutive of *signum.*] *In archaiology.* A seal, or ring used as a seal, which was denominated *annulus signatorius*, or *sigillatorius.*

SIGLA. [Lat.] *In archaiology.* Letters used to express, without the assistance of others, syllables, and sometimes whole words. In fact, initial letters. Cicero calls them *singulæ litteræ;* and other ancient writers *singulariæ litteræ.* St. Jerome styles them *signa verborum;* and Valerius Probus give them the general name of *notæ.*

There are many collections extant of the *sigla* employed in ancient inscriptions. The most complete are the following:—*Notæ et Siglæ quæ in Nummis et Lapidibus apud Romanos obtinebant explicatæ,* Venice, 1785, 4to.; and another, still more extensive, published by M. J. Gerrard, under the title of *Siglarium Romanum; sive Explicatio Notarum aut Literarum, quæ hactenus reperiri potuerunt, in Marmoribus, Lapidibus, Nummis, Auctoribus, aliisque Romanorum veterum reliquiis, Ordine alphabetico distributa; complectens non tantum singulas quæ in Commentariis antiquis inveniuntur, sed etiam quascunque viri eruditi ad hunc usque Diem, in lucem protulerunt,* London, 1792, 4to. These two useful works comprise all the information published on the subject up to the period of their appearance.

SIGMA. [Gr. Σιγμα.] *In archaiology.* The letter S had at first among the Greeks the form of a C, and the Romans having adopted this form in the construction of their tables, instead of the *triclinium,* the name of *sigma* was given to those which resembled the shape of a horseshoe, round which was placed a couch following the diameter of the table. The most honourable places were those at the two extremities of this bed, and at the void space left by the semicircle the servants introduced the meats.

SIGNINUM OPUS. *In archaiology.* Name given by Vitruvius (book viii. chap. 7), to a particular kind of work made use of in the construction of wells and cisterns. The following is the plan pursued. They mixed five parts of pure sand and two of lime; and having stirred these well together, added pieces of soft sandy stone, about a pound weight each. This mass served to cover the walls or ground work; and, for the purpose of additional solidity, they beat it with masses of wood

pointed with iron. According to Pliny, the *signinum opus* was constructed of pounded tiles and lime.

SILENCE. [Lat. *silentium.*] *In emblematical painting and sculpture.* Silence has been personified by Harpocrates, as a young man with his finger in his mouth. Silence, or rather secresy, is also expressed by a figure lifting a seal to his lips. The allegory was furnished by Alexander the Great, who, observing Hephestion reading, at the same time with himself, a letter which he had received from his mother, drew from his finger the ring which he used as a signet, and placed it on the other's lip.

SILICARII. See CURATOR AQUARIUM.

SILK. [ɼeolc, Sax.] *In archaiology.* The ancients, there is reason to believe, had but a very imperfect knowledge either of the uses of this article or the method of making it. The honour of its invention is sometimes attributed to Pamphilus of Cos. The discovery was soon introduced into Rome, though even in the times of the Emperor Aurelius silk was a rare and expensive thing.

SILL. [ɼyl, Sax.] *In architecture.* The timber or stone at the foot of the door.

SIMIA. [Lat. *an ape.*] *In archaiology.* The simia was one of the objects of veneration among the Egyptians. Upon the Palestrine musaic are represented the figures of several varieties of *simiæ*, or apes.

SIMPLICITY. [Lat. from *simplicitas.*] *In all the arts.* That quality opposed to exuberance or pretension. We say that a work of art possesses a noble simplicity when the effect produced by it is the result of means neither numerous nor complicated. We say also that a form is simply beautiful when, as in the majority of antique vases, it pleases by its agreeable contour alone, without the assistance of any accessories. With regard to an edifice similar remarks apply. It is simply elegant when there is no confused or contradictory diversity of parts, and when the whole is harmonious and graceful. Experience has abundantly proved, that simplicity, as distinguished from meanness or boldness, is always comformable to good taste. This quality may be evidenced in all the different portions of a work, from the general plan even to the execution of the minutest details. The best works of art are always the simplest in point of design. Their projectors sought the principles of grandeur and beauty not in a superfluous quantity of parts, but in unity, in connection, in *tout ensemble*. It is true that the great masters have sometimes produced works the composition of which is extremely rich, but only when the subject necessarily demanded such profusion. When Poussin painted the gathering of manna by the Israelites in the Desert, he could not limit himself to a small number of figures. But often, in the finest specimens of pictorial art, a single group, composed of four or five figures, is found sufficient to tell an interesting story, and to display the most consummate ability in the artist.

In order to attain this most desirable quality, the artist should take care to propose to himself one great aim, one principal *point de vue*, to which every thing else should be subordinate. The grand style presupposes simplicity in all its parts:—in subject, in forms, in attitudes, in composition, in ordonnance, in accessories, &c. It presupposes also a great mind in him who practises—a high taste in him who appreciates and applauds it.

In HOME's *Elements of Criticism*, we find several just observations on this subject. On simplicity in painting we may read with advantage the second of HAGEDORN's *Considérations sur la Peinture.* On simplicity in architecture we may consult the 3d book of the first volume of the *Principes de l'Architecture Civile*, by MILIZIA.

SINUOUS. [Lat. *sinuosus.*] *In the arts of design.* The contours of any figure or artistical performance will appear stiff and rigid if right lines are suffered to predominate. A great variety of curves ought to be described, thus presenting that graceful undulatory outline denominated serpentine or sinuous.

SIPARIUM. [Lat.] *In archaiology.* A curtain serving often, instead of a door, to separate one room from another. The ancient judges in criminal causes were in the habit of having a curtain raised before their tribunal, in order to admit of their discussing the subjects in their hands with freedom and secresy. In cases of minor interest and importance, the veil was left undrawn, and hence arose the two Latin expressions—*ad vela sisti* to denote the curtain being drawn, and *levato velo* to specify an open investigation.

In the temples a *siparium* often concealed the statue of the deity in times when sacrifice was not performing. In the theatres it was adapted to pretty much the same purpose as in our own; but to develope the scene, it was customarily lowered, instead of raised, and left during the spectacle on the ground under the anterior part of the *proscenium*, until increas-

ed skill enabled them to sink it beneath the stage by means of a trap.

SHEATH. [ꝛcæthe, Sax.] *In sculpture.* The under part of a hermes, from which the head may be said to issue, as from a sheath. This was the most ancient form of statuary, which employed at first nothing but square stones, at top of which heads were carved. The Palladium was shaped in this manner. See PALLADIUM. It was customary to put half way down the emblem of virility when a man's bust was intended. See HERMES, SCULPTURE.

SISTRUM. [Lat.] *In archaiology.* Or CISTRUM. A kind of musical instrument used by the priests of Isis and Osiris. It is described by Spon as of an oval form, in manner of a rocket, with three sticks traversing it breadthwise; which playing freely by the agitation of the whole instrument, yielded a kind of sound, which to them seemed melodious. Mr. Malcolm takes the *sistrum* to be no better than a kind of rattle. Oiselius observes, that the sistrum is found represented on several medals and on talismans.

SITE. [Lat. *situs.*] *In architecture.* The situation of a building, and sometimes the ground-plot or spot of earth it stands on. The term is occasionally used to denote the particular spot or tract presented in the landscape of a picture.

SKETCH. [*schiazzo*, Ital.] *In painting, drawing*, &c. This word expresses the first idea of the subject of any given picture, traced with the earliest fire of composition, before the enthusiasm the painter may be supposed to feel has been sobered down by judgment. Sketches are made either with carbon, with the pen, or the pencil; in general that method is preferred which seems to present the greatest promptitude and facility. It is this rapidity of execution, indeed, to which may fairly be ascribed that fire and animation perceptible in the sketches of the great masters. These, and more particularly such of them as are peculiarly happy in composition, are extremely useful to the artist. A painter of genius rarely confines himself to a single idea for his composition. His first sketch has generally the advantage of being the most brilliant, but is at the same time subject to the defects inseparable from haste. The following one offers the results of a moderated imagination, whilst those succeeding mark the rout which the artist's judgment has pursued, and which it will be matter of no small interest to the student to trace. A comparison between the sketches of the great masters and their finished pictures is also interesting from suggesting reflections on their character, their modes of thinking, their style in its details, &c. and sometimes it affords means for appreciating the constraint that has impelled them to substitute for their own reasonable ideas, others absurd and ridiculous, arising either from the vanity or bad taste of their employers.

The student must however be guarded, in the contemplation of sketches, from being seduced into indecision or looseness of style, which too great a fondness for taking them as models may probably superinduce. See DRAWING.

SKIN. [*skind*, Danish.] *In painting and sculpture.* The natural covering of the flesh. It has been remarked that the ancient artists took no care to mark the variety presented by the surfaces of skin either in statues of their divinities or in such as were placed at a great distance from the eye. But it would be erroneous to conclude from hence that they were deficient either in observation, or in the skill necessary to display its fruits; for an examination of some of their finest heads would soon show that they possessed great excellence in rendering wrinkles and folds of skin: and the Laocoon presents an eminent instance of adroitness in expressing all the peculiarities of a skin agitated by the swelling of the veins, the crispation of the cutaneous muscles, and the violent contraction of the tendons. This sculpture, together with those of the Gladiator, the kneeling Venus, the Hermaphrodite, &c. and the paintings of Raffaelle and Guido, may be confidently selected by the student whereon to form his taste and style in the expression of the skin.

SKINS. [same derivation.] *In ancient costume.* Skins were very much employed, and formed likewise the ordinary couch and coverlid. Skins were also used before the invention of saddles, to supply the purpose now answered by them. Among the Greeks, they were frequently used (at least those of animals sacrificed) to ornament the statues of their gods. Tents were constructed likewise, both by the Greeks and Romans, of the skins of beasts.

SMALT. [Lat. *smaltum.*] See ENAMEL.

SMARAGDUM. [Gr. σμαραγδος.] See EMERALD.

SOBRIQUET. [Fr. a name arbitrarily given: a nickname.] *In all the arts.* This term is introduced here in order to mention the practice, which has so frequently obtained among artists of giving them a surname by which they are more readily known than by their proper appellation,

and which is commonly derived either from the town where they were born, from some feeling of derision, or from some particular habit of the bearer. Thus, for instance, Anthony Allegri is called *Correggio;* Francis Mazzuoli, *Parmegiano;* Paul Cagliari, *Veronese*, &c. from the towns where they first saw the light. Zimenes de Navaretta was surnamed *el mudo*, or the dumb, he having been deprived from birth of the faculties of speech and hearing. Peter Breughel was denominated the *droll*, from his fondness for saying *good things;* while John, his son, received the *sobriquet* of *velvet Breughel*, since he wore velvet coats in winter, a remarkable luxury towards the end of the sixteenth century. The surname is sometimes regulated also, by the particular sort of work practised by the artist; as, in the case of Michel Ange Cerquozzi, called Michel-Ange *des Bambochades*, from having been chiefly employed in painting grotesque subjects.

Society. [Lat. *societas.*] *In all the arts.* See Academy.

Sock. [Lat. *soccus*, either from Gr. σακκος, a bag, or from *siccus*, dry, because they were a protection from the wet.] *In archaiology.* A covering for the feet somewhat similar to the Cothurnus (which word see) and often applied particularly to the shoes, soles, or sandals worn by the comedians.

Soffit or Soffita. *In architecture.* The under part or cieling of a cornice. Any timber cieling formed of cross-beams of flying cornices, the square compartments or panels of which are enriched with sculpture, painting, or gilding; such are those in the palaces of Italy, and in the apartments of the Luxembourg at Paris. The term is also employed for the under side or face of an architrave; and more especially for that of the corona or larmier, which the ancients called *lacunaria* (which see), the French denominate *plafond*, and we usually the *drip.* It is enriched with compartments of roses; and in the Doric order has eighteen drops, disposed in three ranks (six in each), placed to the right of the *guttæ* at the bottom of the triglyphs. The word soffit has likewise been applied to the cieling of an arch.

Softening. [from *to soften.*] *In painting.* The mixing and diluting of colours with the brush or pencil.

Solarium. [Lat. from *sol*, the sun.] A sundial. A platform at top of the houses of the ancients where the inhabitants walked to take the air and occasionally took refreshments. The word *solarium* likewise signified an impost levied on those who received permission to build upon the public ground. The exaction as well as the fixing of this tax rested with the *curators* of the public places.

Solder or Sodder. [*soldare*, Ital. *solidare*, Lat.] A metalic or mineral composition used in soldering or joining together other metals. Solders are made of gold, silver, copper, tin, bitumen, and lead: usually observing that in the composition there be some of the metal that is to be soldered mixed with some higher and finer metals. Goldsmiths generally make four kinds of solder, viz. solder of eight, where to seven parts of silver there is one of brass or copper; solder of six, where only a sixth part is copper; solder of four and solder of three. It is the mixture of copper in the solder that makes raised plate always come cheaper than flat.

Soldering. [from *to solder.*] The joining and fastening together of two pieces of the same metal, or of two different metals, by the fusion and application of some metallic composition on the extremities of the metals to be joined.

Solea. [Lat. from *solum*, the sole of the foot.] *In ancient costume.* A kind of shoe, having nothing on the upper part of the foot but latchets. See Sandal.

Somnus. [Lat.] *In allegorical painting and sculpture.* Somnus, or sleep, seems to be placed by Virgil in the *previous region*, or entrance into the infernal shades, on account of his relation to Læthum, or Lethe, though Ovid and Statius gives him a place on our earth. He is generally represented by the artists as a soft youth stretched out at his ease on a couch, resting his head on a lion's skin (and sometimes on a lion, as in a statue in Maffei) with one arm either a little over or under his head, and the other hanging down negligently by the side of the couch, with poppies in it, or a horn full of poppy-juice. He is often winged, and so like Cupid as to have been frequently taken for one, notwithstanding the lizard at his feet, the proper attribute of Somnus, as it sleeps half the year. The lizard is not mentioned by the poets, and might be used by the artists merely for distinction, though the poppy seems sufficient for that purpose, except in some few pieces, where the distinguishing attributes of both are blended together. In that case these may be Cupids under the character of Somnus.

The poets speak often of the wings of Somnus, and of their being black, as most proper for the god who chiefly rules at night. For the same reason his figures are of ebony, basalt, or dark coloured

marble. Such is the fine statue at Florence which holds a horn in his hand so remissly that the poppy juice is running out of it. Somnus is supposed to communicate sleep to mortals by pouring out of his horn on them, by touching them with his *virga* or rod, or by gently passing by their bedside. When he gave troubled sleep or tumultuous dreams, he mixed water from some infernal river with his poppy juice.

Statius describes Somnus more frequently than any other poet. He represents him standing on the highest point in the moon's course, and hovering down from thence with his wings spread over the earth, just at midnight. He speaks of several rilievos, on each of which this god was joined with proper companions. In the first, he was with Voluptas, as the goddess of feasts; in the second, with Labor, represented as tired and inclined to rest; in the third, with Bacchus; and in the fourth with the god of Love.

All these fine images are in Statius's description of the Palace of Sleep. He places it in the unknown parts of Ethiopia, and Ovid in Italy, near the lake Avernus. Somnus's attendants before the gates were: —Rest, Ease, Indolence, Silence, and Oblivion; and within were a vast multitude of dreams, in different shapes and attitudes. Over these, says Ovid, presided the three chiefs who inspire dreams into great persons only: Morpheus, such as relate to men; Phobætor, such as relate to animals; and Photæsæ, such as relate to inanimated things.

Specus. [Lat.] *In archaiology.* The canal into which the water flows in aqueducts raised above the surface of the soil.

Sphæristerium. [Lat. from Gr. σφαιριστήριον, from σφαῖρα, a sphere or ball.] *In archaiology.* A circular court for playing at ball, or other exercises: a tennis court.

Sphæroid. [Gr. from σφαῖρα, a sphere, and εἶδος, form.] *In geometry.* A solid approaching to the figure of a sphere. It is generated by the entire revolution of a semi-ellipsis round its axis. Where the revolution is made round the largest axis, the spheroid is called *prolate;* and when round the shortest *oblate.* This last is the figure of the earth, and most probably of all the planets.

Sphere. [Gr. σφαῖρα.] *In geometry.* A solid contained under one uniform round surface, every point of which is equally distant from a certain point in the middle called its *centre;* and is formed by the revolution of a semicircle about its diameter.

Sphinx. [Gr. σφιγξ, from σφιγγω, to bind.] *In sculpture, &c.* A figure or representation of a monster of that name, famed among the ancients, now mostly used as an ornament in gardens, terraces, &c. It is represented with the head and breasts of a woman, the wings of a bird, the claws of a lion, and the rest of the body like a dog. It is supposed to have been engendered by Typhon, and sent by Juno to be revenged on the Thebans. Among the Egyptians, the sphinx was the symbol of religion, by reason of the obscurity of its mysteries; and on the same account the Romans placed a sphinx in the porch of their temples.

Spina. [Lat.] See Circus.

Spiral. [Lat. *spira,* which from Gr. σπειρα.] *In geometry.* A curve line of a circular kind, which in its progress recedes from its centre.

Spire. [Gr. σπαιρα, a twisting.] *In architecture.* This word, among the ancients, designated the vase of a column, and sometimes the astragal or torus; but among the moderns it signifies a steeple that continually diminishes as it ascends, whether conically or pyramidally. The steeples of Gothic churches are often extremely high, and richly ornamented. The spire of Salisbury cathedral is perhaps the most remarkable instance in our country, and forms a striking object for a considerable extent of country around. See Belfry.

Spolia Opima. [Lat.] *In archaiology.* The armour and other personal spoils of which a conquered chieftain was dispossessed by his vanquisher. These always formed part of the pageantry of a Roman *triumph.* See Triumph.

Spoliatorium. [Lat.] See Apodyterium and Bath.

Spoon. [*spaen,* Dutch.] *In archaiology.* The *Cabinet des Antiques,* at Paris, possesses several specimens of ancient spoons found among the ashes in antique vases. They doubtless answered the purpose of filling the lacrymatories with those odoriferous liquors, or perfumes, which were always profusely scattered over the funeral pile. The handle of these spoons is more or less ornamented, and is sometimes terminated by a small figure.

Square. [*quadratus,* Lat. from *quadra,* which from *quatuor,* four.] *In geometry.* A quadrilateral figure both equilateral and equiangular.

In architecture. A mass of buildings describing the figure of a square, the area or space in the middle being generally ornamented with an enclosure of trees, shrubs, lawn, &c. There are many mag-

nificent squares in London, and one or two deserving notice in Edinburgh.

Square, among mechanics, is an instrument consisting of two rules or branches, fastened perpendicularly at one end of their extremities, so as to form a right angle. It is of great use in the description and mensuration of right angles, and in laying down perpendiculars.

The ancient Romans often applied the term *square* as a synonyme of *regular* or *symmetrical*.

STABLE. [Lat. *stabulum*, from *sto*, to stand.] *In architecture.* Building designed for the lodgment of horses. The noise and unpleasant odour inseparable from a stable should induce the architect to place it at the furthest possible distance from the dwelling-house. In houses of a large class, and in palaces, a separate site altogether is assigned to these kind of offices.

STADIUM. [σταδιον, Gr.] *In archaiology.* The open space wherein the athletic Grecian youth exercised in the course and combated for the prize. In its earliest signification, the word indicated that part of the *gymnasium* appropriated to the use of the spectators. According to Vitruvius's description, it was longer than broad, was rounded at one of its extremities, and furnished with seats and benches.

In its other signification, the *stadium* meant the place itself devoted to the celebration of the public games, as the *Olympic Stadium*, or site of the Olympic games; the *Pythic Stadium*, &c. The lists usually thus denominated were formed by a bank or kind of terrace. Ancient authors particularise three parts of the stadium—the entrance, the middle, and extremity of the career. In the third they ordinarily placed the prizes for which the combatants were to contend.

The *stadia* often formed part of the *gymnasia*. At Thebes was a gymnasium bearing the name of Hercules, and containing a *stadium*. In the same town was also another gymnasium bearing the name of Solaus, the *stadium* of which was surrounded by a bank of earth. Sometimes, likewise, the stadium formed a separate structure, communicating with the gymnasium. The greater part of the Grecian stadia had no other enclosure than an earthen mound, although some were undoubtedly constructed with greater cost and elegance. On the Corinthian isthmus, for instance, was one built, according to Pausanias, of white marble. Another cited by the same author, as possessing great splendour, was that of Herodius Atticus at Athens, which was of Pentelican marble and very extensive. He makes mention, likewise, of several other *stadia*, built separately; such as that of Argos, in which were celebrated the sacred games of the Nemæan Jupiter and of Juno; that of Epidaurus, of Megalopolis, of Tegea, and various other towns. See CIRCUS, GYMNASIUM, PALESTRÆ, &c.

STAFF. [Danish and Dutch, ϝτœϝ, Sax.] See RUDENTURE.

STAIRCASE. [*stair* and *case*.] *In architecture.* An ascent enclosed between walls, or a balustrade consisting of stairs or steps with landing-places and rails, serving to make a communication between the several stories of a house.

In his description of the houses of the ancients, Vitruvius makes no mention of stairs; yet even in the supposition that these dwellings had only a ground-floor, still means would be requisite to mount to the roof. Those staircases conducting to the upper stories of the lesser houses of Rome often ran up the outside of the building, and were secured by a separate door. From this it should seem that there was no interior communication between the several floors. The staircase was not, however, altogether an extraneous erection, but excavated, as it were, in the main wall of the building, and might have been intended to render the different stories more independent of each other—a desirable thing when each was occupied by a separate tenant. In their more recent constructions, however, as well as in houses of a higher order, the staircase was no doubt disposed much in the same manner as at the present day. The building called the country-house, at Pompeii, and several others have staircases of modern appearance, saving that they are narrow and incommodious: the steps are sometimes a foot high. We find occasionally, likewise, private staircases, as in Pliny's Tuscan villa, where it was situated by the side of the dining-room, and destined for the use of the slaves who served the repast. There were also staircases in many of the ancient temples for the purpose of reaching the roof, &c.

In modern architecture, great skill is often displayed in the disposition of the staircase, in order that it may possess convenience of access without interfering with the handsome size and distribution of the various apartments. In houses of the middling size and character, it is generally of wood; but in the residences of the nobility, as well as in public edifices, it is commonly constructed in stone or marble. In fact, this should always be done, where possible; since a double purpose is answered thereby: namely, soli-

dity and freedom from prompt ignition in case of fire. One most desirable point is, to afford to all the several divisions of a staircase the strongest possible proportion of light. The balustrade should be light, and at the same time ornamental; and the wall on the other side, as well as the ceiling above produces a fine effect if adorned with paintings, as in the mansions of many of our nobles.

With regard to form, all kinds of varieties have been in use at different periods. The commonest shape is that in which right lines are employed. Circular staircases have often a very pleasant and handsome effect; but the artist must be a good deal regulated by his space, and the peculiar nature of the ground.

Our limits will not admit us to go into the question of the construction of staircases; for instruction on which head, as well as for further information on the subject generally, we refer the reader to sundry of the practical works which he will find enumerated at the end of our article on ARCHITECTURE.

STAIRS. [ꝑtæȝeþ, Sax. *steghe*, Dutch.] *In architecture.* Steps by which we ascend from the lower part of the building to the upper.

STALACTITES. [Gr. from σταλαγμὸς, a distilling, which from σταζω, to drop.] *In architecture.* An imitation in the artificial grottoes of gardens, of those crystalline spars which in the shape of oblong, conical, round, or irregular bodies, composed of various crusts, are usually found hanging in form of icicles from the roofs of natural caverns, grots, &c.

STALK. [ꝑtealcan, Sax.] *In architecture.* A sort of ornament in the Corinthian capital, sometimes fluted and resembling a stalk, from which spring the volutes and the helixes.

STALL. [ꝑtȩal, Sax.] *In architecture.* The seat of a dignified clergyman in the choir of a church. These are generally enriched with a profusion of carved work, and constructed either of mahogany or oak.

STAND. [ꝑtan'ban, Sax.] *In architecture.* A solid square body placed under pedestals, statues, vases, columns, &c.

STANDARD. [*étendard*, Fr.] *In all the arts.* A rule or measure, by which other things may be regulated. A sort of banner or flag, borne as a signal for the joining together of the several troops belonging to the same body.

STAR. [Gr. ἀστὴρ.] *In archaiology.* This symbol is often found upon medals. Upon those of Julius Cæsar it indicates the star of Venus, the goddess from whom he was fond of deriving his origin; or perhaps the comet which appeared during several days after the death of Cæsar, and which was regarded as his star: Horace, Ovid, and Virgil have all profited in their poems by that popular opinion. The Roman emperor and empress are often represented on medals by a star, signifying the sun, and a crescent, indicating the moon. In fact, stars are the frequent emblems of sovereigns, and are found likewise upon the medals of numerous Roman families and towns.

STATUARY. [*statuaire*, Fr. *vide* statue.] A sculptor. Although this latter word applies to the most elevated practisers of the art, which indeed derives its name therefrom, yet it seems desirable, even in common usage, to distinguish the sculptor who makes statues from him whose skill is chiefly displayed in architectural or other ornaments. The Latins used the word *statuarius* to designate the artist who made figures in bronze. In this sense it is employed by Pliny, who denominates the artist working in marble *sculptor* or *marmorum sculptor*. This distinction appears to be just. The author of a bronze statue is not a sculptor, but a modeller.

Statuary, in its general sense, is the art of casting or carving statues.

STATUE. [Lat. *statua*, from *sto*, to stand.] *In sculpture and statuary.* A work of sculpture or modelling which represents the figure of a man or woman in full relief. The word is sometimes applied likewise to figures of animals executed in the same manner. In the most remote ages we find indications that several eastern nations possessed the art as well as practice of making and of erecting statues, but the Grecians were the first people who executed them skilfully. In the first place, the several heathen deities were represented by human figures, and after awhile the heroes of antiquity were also sculptured forth, and subsequently living characters of eminence or such as had recently expired. These statues were erected in the public places to which the citizens generally resorted, to the end that the memory of the great men might be perpetuated. In the sequel, this particular taste became so widely spread, that there was no other branch of the Fine Arts to which equal attention was paid.

In the early times of the republic, Rome possessed but a small number of statues of gods and distinguished men. After having, however, accomplished the conquest of Greece, and at different epochs transported from that country to Rome a

a vast number of Grecian statues, the taste for this kind of performance became by degrees so ardent and general that, according to the expression of an ancient author, they were able to count at one particular period more statues in the imperial city than inhabitants! They did not content themselves with raising statues to deceased worthies, but awarded that honour to sundry living characters of merit. It was very customary among them to erect statues upon the tombs of their deceased patriots or chiefs; and such veneration was felt for the statues of their princes that the law prohibited a master from punishing an offending slave who had sought refuge near the statue of an emperor. In the age of Tiberius it was a kind of crime to have merely changed a garment before his statues. The erection of statues of public men is by no means equally common in our days: but it is not the less important.

A statue, when it is intended to perpetuate the recollection of a man estimable for his patriotism or merit should be placed in some conspicuous spot, where it would be most likely to attract the observation of the people. Mere resemblance of feature is by no means the only, or even the principal *desideratum* in a statue; it should display in a striking manner the elevation of soul, the grandeur of character which might have rendered the object worthy of calling forth the exercise of the sculptor's chisel. Whether he might have been distinguished by probity and benevolence, or by intrepidity in the midst of dangers, or by any other elevated virtue, the expression of this should be preserved in the statue. Many of the statues of antiquity, which express the ideal of great characters, or of divinities, prove that the art of the sculptor is fully equal to this task. Indeed a considerable number of them are merely allegorical representations of various abstract qualities and properties. It is thus that Jupiter is the image of severe majesty joined to goodness; and Pallas that of the most consummate wisdom, &c.

The general character of a man may be more justly gathered when he is in a state of repose than when agitated by any particular and transitory passion; and according to this theory it is fair to presume that a tranquil attitude is best adapted to express the prevailing character of the personage represented by a statue. This opinion, however, is to be received with some reservation, although the ancients will be found to have generally adopted it.

It will not, we suspect, be deemed a questionable affirmation that a fine statue is one of the most beautiful productions of genius and of art. The Greeks admired Phidias even more than any other of their illustrious men. The critical examination of a statue requires no inconsiderable portion of knowledge, taste, and skill. The first point to which the attention of the critic should be directed is the marble, from a careful scrutiny of which, the period when the statue was made may often be ascertained. For instance, the certainty that any given statue is of marble of Luna renders it evident that its age cannot be anterior to that of Augustus, since it was under that prince's reign the Luna quarries were discovered. The critic should proceed to take the exact measure of the statue; to describe its attitude; to indicate what restorations it might have undergone; to decide whether it is the representation of a divinity or hero, or simply of some distinguished ancient, &c. &c. It is also desirable that he should be acquainted with its history, traditional or otherwise, the authors who have mentioned it, the period of its discovery, the different prints engraved of it, &c.

The principal works in which the student will find representations of the most celebrated statues are the following:—J. B. Carolleri, *Antiquæ Statuæ*, Rome, 1585, fol. J. J. De Rubeis, *Insigniores Statuarum urbis Romæ Icones*, Rome, 1645, 4to. Maffei, *Raccolta di Statue Antiche e Moderne*, Rome, 1707, fol. *La Galeria Giustianea.—Vetera Monumenta quæ in hortis cælimontanis et in ædibus Matthæorum adservantur*, 3 vols. fol. Rome, 1779—9. Zanetti, *Delle antiche Statue Greche e Romane che nell' Antisala della Libreria di San Marco, e in altri luoghi publici di Venezia si Trovano*, Ven. 1740, 2 vols. fol. *Les Marbres de Dresde*, by Le Plat, Dresden, 1733, fol. The three first vols. of *Museo Pio Clementino*, by Visconti. The 3d vol. of *Museum Capitolinum*. *Le Musée Napoléon*, by Piroli. *La Villa Pinciana*, and *Monumenti Gabini*. The *Augusteum* of M. Becker, &c. &c.

The reader may also consult with advantage the following works on statues:—Edmundus Figrelius, Liber de Statuis illustrium Romanorum, Holmiæ, 1656, 8vo. Frid. Muller, libri xi. de Statuis Romanorum, 1664, 4to. J. Gronovius, Dissertatio de Imaginibus et Statuis Principum, Lugd. Bat. 1708. Justinus Muncii, de Statuis Veterum Romanorum, Hafniæ, 1714. Antonius Ferrius, Jurisconsult of Naples, published in 1606, in Italian, a

work on the twelve statues found among the ruins of a temple at Cumæ. Havercamp has given a Latin translation thereof in the 9th vol. of Thesaurus Antiquitatum et Historiarum Italiæ. Discours sur la Statue equestre de Frederic Guillaume, érigée sur le Pont-Neuf à Berlin, par Chas. ANCILLON, 1703, fol. G. G. BŒRNER, De Statuis Achilleis, Lips. 1759, 4to. RAISSANT, Dissertation sur les Statues, in the Journal des Savans, for the year 1686. M. de BOZE has inserted in the Journal de Trévoux for the year 1706, a Dissertation upon statues, inscriptions, medals, crowns, and other recompenses of merit among the ancients. BOIVIN, in his Mémoire sur la Vie et les écrits de Gregoras, has treated, at p. 766, of the statues of Justinian, of Louis XIII., Louis XIV., Henry IV., &c. De Simulacris Veterum Romanorum, by F. M. BONADA, in the 1st Dissertation of the 1st vol. of his Carmina ex Antiquis Lapidibus illustrata, Rome, 1751 and 1752, 2 vols. 4to. Des Hermes, Hermathènes, Hermanubes, et Hermeracles, in the Recherches Curieuses d'Antiquité, by SPON, at p. 98, Lyons, 1683, 4to. I. NICOLAI, *Diatriba* de Mercuriis et Hermis, Francof. 1701, 12mo. J. SCHLEMMIUS, De Imaginibus Veterum Atriensibus, Præliminaribus, Cubicularibus; Jena, 1664. F. LEMÉE, Traité des Statues, Paris, 1688, 8vo. De l'Usage des Statues chez les Anciens, by the Comte de GUASCO, Brussels, 1768, 4to.

See also ACROLITHES, AGALMA, CARYATIDES, CANEPHORES, DISCOBOLUS, DRAPERY, EIKON, CHILD, KERMES, LAOCOON, PASQUIN, SCULPTURE, &c.

STEATITE. [Gr. σεατιτης.] *In gem sculpture.* A genus of magnesian earths, very ductile, yet capable of being hardened sufficiently to receive the impression of the graver.

STEEPLE. [ꞅteopel, ꞅtypel, Sax.] *In architecture.* An appendage erected generally in the western end of churches, to hold the bells. Steeples are denominated, according to their form, either spires or towers: the first are such as ascend continually diminishing either conically or pyramidally: the latter are merely parallelopipeds, and are covered at top platform-wise. The steeple appears to have originated in Gothic architecture.

STELA. [Gr. ϛηλη, from ἵϛημι, to stand.] *In architecture.* See CIPPUS, of which this word is a synonyme.

STEPHANEPHORÆ. [Gr. ϛεφανος, a crown, and φερω, to bear.] *In archaiology.* Thus were designated priests of a particular order consecrated to different divinities and to emperors. In several towns, as we find by medals and other monuments, the functions of the stephanephoræ were annual.

STIFF. [ꞅtiꝼ, Sax. stiff, Danish, stijff, Dutch.] *In all the arts.* Constrained, laboured, wanting in ease and gracefulness of style. Such, for example, are the Egyptian figures, those of the most ancient Greek style, certain Gothic figures, &c. Stiffness is essentially opposed to beauty of form. Nature, bountiful in almost all her provisions, has given to the limbs and movements of men freedom and suppleness; and it is only through the unworthy affectation which sometimes springs from sophisticated habits of society, that constrained or stiff movements are discernible, except in people out of health.

STILPHON. [Gr. ϛιλπονες, dwarfs.] See DWARF.

STIRRUPS. [ꞅtiꞃap, Sax.] *In equestrian costume.* The ancients were ignorant of the use of this convenient article; the emperor Mauritius, who flourished towards the end of the sixth century being the first who makes mention of them, in his *Treatise on the Military Art.* Owing to this privation the Roman youth were accustomed to leap upon their horses sword or lance in hand. A jasper explained by Winckelman, a *basso-rilievo* engraved by Roccheggiani, and the painting of a Greek vase published in Millin's *Recueil de Monumens,* all exhibit warriors mounting on horseback by help of a cramp-iron attached to the pike or lance. Distinguished persons and old men had servants to place them on their horses, and conquered sovereigns were often compelled to perform this office for their vanquishers. Caius Gracchus, in order to merit their good opinion and suffrages, caused to be placed at certain distances along the high roads, after the example of the Greeks, large stones to assist the horsemen in mounting.

STOLA. [Lat. from Gr. ϛολὴ, from ϛελλω, to adorn or dress.] *In archaiology.* The habiliment of Roman ladies of the higher rank. It consisted of a tunic with an *instita* or train. This had a great number of small folds, and terminated often by a border of purple or embroidery sometimes even of gold. To be clothed with the *stola* was, among the Roman dames, as if one should say to be in full dress; beneath they wore a *palla,* the ample folds of which formed a drapery both elegant and majestic. One of the most beautiful antique statues which brings us acquainted with the real gracefulness of form, both of the *stola* and *palla,* is that to which an antique head has been adapted of the Empress Sabina. This statue, evidently from its

size an honorary one, holds in the left hand a cornucopia, a symbol characteristic alike of unity, abundance, and fortune.

STONE. [ꝼtan, Sax. steen, Dutch.] *In architecture*, &c. Stones are bodies insipid, hard, not ductile or malleable, nor soluble in water. In the most ancient times wood was employed by preference in the arts of construction, because it was more ductile to fashion and to work. In some countries, such for instance as Egypt, wherein wood is rare, they found themselves however obliged to build with stone, and the solidity and endurance of this substance soon caused its introduction into other countries. In those which possessed not an abundant supply of stone, bricks (see that word) were substituted. The Greeks were in the habit of employing stone upon several of their theatres, temples, and other public buildings, before the introduction of marble.

Stones are of various qualities, and extracted from various places. Their two great divisions are into hard and soft stones. The former are calculated to resist the injuries of the air, and to support immense burdens; while the latter are principally employed in works wherein mouldings or other sculptured ornaments are introduced. They also vary in colour, as well as in degrees of ductility.

The *Rocking Stone*, or *Logan*, is a stone of prodigious size, so exactly poised that it would rock or shake with the smallest force. Of these stones the ancients give us some account. Pliny says that, at Harpasia, a town of Asia, there was a rock of such a wonderful nature that if touched with the finger it would shake, but could not be moved from its place with the whole force of the body. Ptolemy Hephestion mentions a gygonian stone near the ocean, which was agitated when struck by the stalk of an asphodel, but could not be removed by a great exertion of force. The word *gygonius* seems to be Celtic; for *gwingog* signifies *motitans*, the rocking stone.

Many rocking stones are to be found in different parts of this island; some natural, others artificial, or placed in their position by human art. In the parish of St. Leven, Cornwall, there is a promontory called *Castle Treryn*. On the western side of the middle group, near the top, lies a very large stone, so evenly poised that any hand may move it from one side to another; yet it is so fixed on its base, that no lever nor any mechanical force can remove it from its present situation. It is called the *Logan-stone*, and it is such a height from the ground that no person can believe that it was raised to its present position by art. But there are other rocking stones, which are so shaped and so situated, that there can be no doubt but that they were erected by human strength. Of this kind Borlase thinks the great *Quoit* or *Karnlehau*, in the parish of Tywidnek, to be. It is thirty nine feet in circumference, and four feet thick at a medium, and stands on a single pedestal. There is also a remarkable stone of the same kind in the island of St. Agnes in Scilly. The under rock is ten feet six inches high, forty-seven feet round the middle, and touches the ground with no more than half its base. The upper rock rests on one point only, and is so nicely balanced, that two or three men with a pole can move it. It is eight feet six inches high, and forty-seven in circumference. On the top there is a basin hollowed out, three feet eleven inches in diameter at a medium, but wider at the brim, and three feet deep. From the globular shape of this upper stone, it is highly probable that it was rounded by human art, and perhaps even placed on its pedestal by human strength. In Sithney parish, near Helston, in Cornwall, stood the famous logan, or rocking stone, commonly called *Men Amber*, q. d. *Men an Bar*, or the *top stone*. It was eleven feet by six, and four high, and so nicely poised on another stone that a little child could move it, and all travellers who came this way desired to see it. But Shrubsall, Cromwell's governor of Pendennis, with much ado caused it to be undermined, to the great grief of the country. There are some marks of the tool on it, and by its quadrangular shape, it was probably dedicated to Mercury.

That the rocking stones are monuments erected by the Druids cannot be doubted; but tradition has not informed us for what purpose they were intended. Mr. Toland thinks that the Druids made the people believe that they alone could move them, and that by a miracle; and that by this pretended miracle they condemned or acquitted the accused, and brought criminals to confess what could not otherwise be extorted from them. How far this conjecture is right we shall leave to those who are deeply versed in the knowledge of antiquities to determine.

STONEHENGE. This celebrated monument of antiquity is of very uncertain date. That it is very ancient is admitted by every one, but its origin, intention, and era, are points of the most doubtful con-

troversy. Its situation is on Salisbury Plain, six miles from the city of this name.

It is described by Camden as a huge and monstrous piece of work, such as Cicero termeth *insanem substructionem.* For within the circuit of the ditch, he says, there are erected, in manner of a crown, in three ranks or courses, one within another, certain mighty and unwrought stones, whereof some are twenty eight feet high, and seven broad; upon the heads of which others, like overthwart pieces, do bear and rest cross-wise, with small tenons and mortises, so that the whole frame seemeth to hang: on which account we call it Stoneheng, as our old historians termed it, because of its magnitude, *chorea gigantum,* the giant's dance. The perpendicular stones are called coarse stones, and the overthwart ones are called cronets. This antiquity, says Mr. Inigo Jones, because the architraves are set upon the heads of the upright stones, and hang, as it were, in the air, is generally known by the name of Stoneheng. The whole work, in general, being of a circular form, is a hundred and ten feet in diameter; double winged about, without a roof; anciently environed with a deep trench, still appearing about thirty feet broad: so that betwixt it and the work itself, a large and void space of ground being left, it had from the plain three open entrances, the most conspicuous of which lies north-east; at each of which was raised, on the outside of the trench, two huge stones, gate-wise; parallel to which, on the inside, are two others, of less proportion. The inner part of the work, consisting of an hexagonal figure, was raised, by due symmetry, upon the bases of four equilateral triangles, which formed the whole structure. This inner part was likewise double, having within it also another hexagon raised; and all that part within the trench, situated upon a commanding ground, eminent, and much higher than the surrounding plain; in the midst of which, upon a foundation of hard chalk, the work itself was placed; insomuch that, from whatsoever part they came into it, they rose by a hill of easy ascent. In the inmost part of the work is a stone, appearing not much above the surface of the earth, and lying towards the east, four feet broad, and sixteen feet long; which, whether it be an altar or no, this author refers to the judgment of others. The great stones, which are made the entrances from the outside of the trench, are seven feet broad, three feet thick, and twenty feet high. The parallel stones on the inside of the trench are four feet broad, and three feet thick; but they are so broken, that their proportions in height cannot be exactly measured. The stones which make the outward circle are seven feet broad, three feet and a half thick, and fifteen feet and a half high; each stone having two tenons mortised into the architrave continuing upon them, throughout the whole circumference. For these architraves being jointed exactly in the middle of each of the perpendicular stones, that their weight might have an equal bearing; and upon each side of the joint a tendon wrought (as remains yet to be seen), it may hence positively be concluded, that the architrave is continued round about this outward circle. The smaller stones of the inner circle are one foot and a half broad, one foot thick, and six feet high. These had no architrave upon them, but were raised perpendicular, of a pyramidal form. The stones of the greater hexagon are seven feet and a half broad, three feet and three quarters thick, and twenty feet high, each stone having one tenon in the middle. The stones of the inner hexagon are two feet and a half broad, one foot and a half thick, and eight feet high, in form pyramidal, like those of the inner circle. The architrave lying round about upon the perpendicular stones of the outward circle, is three feet and a half broad, and two feet and a half high. The architrave on the top of the great stones of the outward hexagon, is sixteen feet long, three feet and three quarters broad, and three feet and a quarter high. This architrave, continuing only from stone to stone, left betwixt every two and two, a void space free to the air, uncovered. The vulgar have thought it ominous, and indeed absolutely impossible, to count the number of stones composing this ancient monument. To this legendary tale Sydney refers in his sonnet of the wonders of England, when he says,

Near Wilton sweet, huge heaps of stones are found,
But so confused, that neither any eye
Can count them just, nor reason try,
What force brought them to so unlikely ground.

In reference to this absurd superstition, Mr. Jones says, that if any one will observe the orders of the circles as they now appear, without passing from one to another confusedly, and note where he begins, he may easily find the number. Dr. Stukely computes them in the following manner: "the great oval," he says, "consists of ten uprights; the inner with the altar, of twenty; the great circle of thirty; the inner of forty; which are a hundred

upright stones; five imposts of the great oval; thirty of the great circle; the two stones on the bank of the area, the stone lying within its entrance, and that standing without; and another on the ground directly opposite to the entrance of the avenue; so that the whole number is a hundred and forty." This writer observes, that, according to the intention of the founders, the whole circle of the work was to consist of thirty stones, each stone to be four cubits (a cubit being twenty inches and four fifths English measure) broad, each interval two cubits; thirty times two cubits sixty; and, therefore, thrice sixty cubits complete a circle, whose diameter is sixty. A stone four cubits broad, and two thick, is double the interval, which is a square of two cubits.

STORM. [Danish and Dutch.] *In archaiology.* Among the ancients, those who had suffered shipwreck shaved the head, and hung up their vestments in the temple of Neptune, with the accompaniment of a painting whereon the history of their misfortune was represented. Such as had endured a loss sufficiently great, through the same means, to reduce their circumstances materially, often went begging with a similar picture hanging on their neck. Petronius relates, that such as found themselves in peril of shipwreck were accustomed to cut their hair and to suspend from their necks pieces of gold or of some other precious metal, in order to remunerate those who might find their bodies, for bestowing thereon the rites of sepulture.

The first custom mentioned above is beautifully alluded to by Horace in his ode beginning

Quis multa gracilis te, puer in rosa,

translated by Milton with all the exquisite and unaffected grace of the original.

What slender youth bedew'd with liquid odours
Courts thee on roses in some pleasant cave,
Pyrrha? for whom bind'st thou
In wreaths thy golden hair,
Plain in thy neatness? O how oft shall he
On faith and changed gods complain, and seas
Rough with black winds and storms
Unwonted shall admire!
Who now enjoys thee credulous, all gold,
Who always vacant, always amiable
Hopes thee, of flattering gales
Unmindful. Hapless they
To whom thou untried seem'st fair. Me in my vow'd
Picture the sacred wall declares to' have hung
My dank and dropping weeds
To the stern God of sea.

STORY. [ϝτορ, place, Sax.] *In architecture.* A floor; a flight of rooms.

STOVE. [*stoo*, a fireplace, Icelandick.] *In archaiology.* The Romans were in the habit of employing two kinds of stoves with which to heat the chambers and other apartments of their houses. Of these, the first kind were furnaces constructed under the floors (see HYPOCAUSTUM) and the warmth from which was conducted by means of tubes into the rooms on the different stories.

STRIGÆ. [Lat.] *In architecture.* The flutings of a column.

STROPHEION. [ϛροφιον, from ϛρεφω, to twist.] or STROPHIUM. [Lat.] *In archaiology.* Name of a cincture worn by the Greek females below the throat. The term was also applied to a sort of machine used in the theatres of the ancients, somewhat resembling the PERIACTOS (see that word).

STUCCO. [Ital.] *In architecture.* A composition of white marble pulverized and mixed with plaster of lime; and the whole being sifted and wrought up with water, it is to be used like common plaster. Architectural and sculptural ornaments, such, for instance, as fruits, flowers, garlands, festoons, &c. are made herein.

In the interior of buildings, stucco work is generally applied to the cielings of apartments, the mouldings, &c. On the exterior it should be confined to those parts which are not too much exposed to the rain. In some countries, they make a sort of stucco of common mortar and of plaster, which applied to the outside of houses is extremely durable. It appears that Vitruvius makes mention of stucco in the 2d, 3d, and 6th chapters of the 7th book, under the name of *Opus Albarium* or *Opus Coronarium.* Immediately after the stucco is mixed, it forms a very soft and ductile paste, the consistence of which however soon hardens, and then the desired form is given to it, whether with moulds, or, as in some cases, with little spatula of iron. During this operation, it continues to harden, and may even be cut, and it is at this period those parts of the ornaments are executed which demand a nice finish. In a few days after, it acquires the consistence of dry clay, and ultimately becomes as hard as stone itself (of an average thickness) and takes a beautiful polish. The invention of stucco work is extremely useful, inasmuch as it is a great deal more economical than similar performances would be if executed either in stone or wood.

The following treatises may be consulted on this subject:—Joh. Aug. CORVINUS, *Artis Sculptoriæ, vulgo Stuccatoriæ, Paradigmata. Aug. Vindel.* 1708. Jean Melchior CROEKER, between the 22d and 29th chapters of his *Instruction à l'Usage des Peintres.*

In the *Traité des Couleurs pour la Peintre en Email*, by Anclais de MONTAMY, we find also details respecting *the art of stuccoing*. *Appeal on the Right of using Oil Cement or Composition for Stucco*, 1779, 8vo.

STUCCOER. [from to *stucco*.] *In architecture*. The following is a list of the most eminent stuccoers:—Margaritone, who died in 1317, and who is generally regarded as the inventor of the art. Barthelemi Ridolfi, who died towards the year 1550. Giovanni Nanni, died, 1564. Leonard Ricciarelli, towards 1570. Luca Romano, about 1586. Arudini and Branchi, about 1640. Roncaioli, 1660. G. F. Bezzi, 1690. G. B. Artario, about 1700. G. B. Genone, same year. A. Disegna, 1710. S. Busi, 1730. A. Stazio; M. Costa; Clerici, who died about 1745. C. Mazzetti, surnamed Tenchola, towards 1750. G. Artario, 1769. B. Bossi, &c.

STUDY. [Lat. *studium*.] *In all the arts*. He who would merit the appellation of a perfect artist should distinguish himself at the same time by genius, by acquirements, and by practical address. Genius is a gift of nature; acquirement is the product of study and of practice. Natural genius is unquestionably indispensable towards constituting a great artist; but it would be a fatal error in any one to imagine that, with the help of some occasional practice in the mechanical part of the art, genius unassisted would suffice to constitute an artist. We always find, with regard to every individual who has presented proofs of genius, that he at the same time was conspicuous for the care and assiduity with which he had pursued the necessary studies. A brief mention of the principal points to which the studies of an artist should be directed will not be out of place in the present article. It is not our province to speak of such general preparatory studies as appertain to every man who would uplift himself above the vulgar, of such as enlarge the circle, generally, of men's ideas, without having any particular application to the cultivators of the Fine Arts. We may nevertheless observe, in passing, that every thing which serves to develop the various dispositions and tendencies of genius, all those points of knowledge which contribute to give to a man extensive and clear ideas, are of indisputable advantage to the student of art. It is certain that there have been great artists who have been almost wholly destitute of literary knowledge; but even in their cases, abundant reason appears for believing that this deprivation prevented them from taking still more rapid strides towards perfection. Raffaelle himself is known to have often availed himself of the hints thrown out by learned friends when his genius had been arrested by a defective education.

The points of study, however, which appear to belong more decidedly to the follower of the Fine Arts, are—1. A general knowledge of man; 2. A knowledge of the particular character and manners of entire people as well as of individuals; 3. A knowledge of nature in all her various appearances; and 4. An acquaintance with the works of art and with artists.

Without the first branch of knowledge, it must be evident that little or no progress can be made by the student. Without it, how is it possible that he should understand what is necessary to make an impression on the minds of his spectators? This study must be commenced by a scrupulous attention to the movements of his own mind, particularly to all those sensations which produce either pleasure or pain. The man who is without clear ideas of his own emotions will never arrive at the knowledge of others, and consequently will never become an artist.

A general knowledge of human nature will nevertheless not suffice for the artist. He must also distinguish differences of character and manners. In order to acquire this quality he must strive to introduce himself into all kinds of society, and especially at those times when interesting occupations put men into full activity, and the force of their genius has an opportunity of developing itself freely. To observations of this kind he should unite inquiries respecting other nations besides his own, and comparisons with the customs of ages previous to that in which he himself exists.

To these studies should be joined that of external nature. We have often had occasion to repeat that Nature is the true school for the artist; but it is necessary that he should be aware *how* to study in this school. The feeling of the beautiful, of unity, and of variety, of the accord of exterior forms with interior character, of the harmony of all the parts, of the truth and perfection—in a word all the fine points which make up the general excellence of a work of art, will be strengthened, harmonised, and concentrated by an assiduous and intelligent reflexion on the face of Nature. We shall always discover that the most distinguished artists have been at the same time the most scrupulous and patient observers of the world around them, and

that they have regarded with attention and care whatsoever passed under their eyes. It also frequently happens that we find either in some customary appearance of nature, or in some occasional phenomenon, the original of a fine idea which an unobservant amateur might have attributed solely to the imaginative faculty of the painter.

To conclude:—in addition to the points already enumerated, the student should make himself familiar with the best works of the best masters. It is a well established truth that examples instruct, if not better, at least more rapidly than rules; and they are to be met with alone in the performances of the great masters who adorn the various schools of art. To these, then, let the student repair, at least to as many of them as lie at all within his reach: and let him dwell on their several beauties, not with the doting and slavish eye of a servile copyist, but with the free spirit of observant emulation. Good biographies of celebrated artists, so useful and interesting in other points of view, are no less so in this: the recital of their methods of study, of the peculiar circumstances in which they were placed, of the connexions they formed, in a word, of all those things which contributed to expand and develope their talent, cannot fail to be extremely serviceable to the onward progress of the young student. See IMITATION, PAINTER, SCULPTOR, ARCHITECT, &c.

STUDIES. *In painting.* Such is the term applied to those separate parts of a picture first designed and painted unconnectedly, with a view to their future introduction and composition in the entire work. Thus, entire figures, in some instances; in others, human heads or feet, animals, trees, plants, flowers, and, in short, any thing designed after nature, receive the general denomination of *studies.*

STRIGIL. [Lat.] *In archaiology.* A little instrument of ivory or horn, and sometimes of gold or silver, in great use among the ancients, chiefly for the purpose of rubbing and cleansing the skin when bathing or engaged in athletic sports.

STYLE. [*stylus*, Lat.] *In all the arts.* The union of all those several parts which unite in the conception, composition, and execution (see the two last words) of a work of art. There are an infinite variety of different styles; among which may be enumerated as the principal and most general, the *grand*, the *sublime*, the *beautiful*, the *expressive*, the *impassioned*, and the *natural*. Having already in various parts of this Dictionary made reference to these varieties, and taken occasion to detail and explain them, we do not conceive it necessary to go here over the same ground, but refer our readers to the articles GRAND, NATURAL, BEAUTY, EXPRESSION, SUBLIME, &c. as well as to the leading articles, of ARCHITECTURE, PAINTING, ENGRAVING, SCULPTURE, and SCHOOLS OF ART.

STYLE. [same derivation.] *In archaiology.* An iron or steel-pointed instrument used anciently in writing on tablets of wax, &c. and still used to write on ivory leaves, and paper prepared for the purpose.

Any thing with a sharp point: as a graver, the pin of a dial.

STYLOBATE. [Gr. στυλος, a pillar, and βασις, the base or foot.] *In architecture.* A kind of continued pedestal or of basement which has itself base and cornice, and which projects both in front and behind the columns which it supports.

STYX. [Gr. from στυγεω, hateful.] *In mythological painting and sculpture.* A celebrated river of hell, round which it is said to flow nine times. According to some writers the Styx was a small river of Nonacris in Arcadia, whose waters were so cold and venomous that they proved fatal to such as tasted them. Among others, Alexander the Great is mentioned as a victim to their fatal poison, in consequence of drinking them. They even consumed iron, and broke all vessels. The wonderful properties of this water suggested the idea, that it was a river of hell, especially when it disappeared in the earth a little below its fountain head. The gods held the waters of the Styx in such veneration, that they always swore by them, an oath which was inviolable.

SUBJECT. [Lat. *subjicio*, from *sub*, under, and *jacio*, to lay or throw.] *In all the arts.* The design of a composition or picture. Any thing which constitutes the object or aim of any given art or science. In painting, sculpture, and engraving, it often designates the representation of an action. See ACTION, MOTION, OBJECT, &c.

SUBLIME. [Lat. *sublimis.*] *In all the arts.* That which of its kind is most fully possessed with force and grandeur, and which by consequence excites at once our surprise and admiration. This faculty operates, if we may so express it, by sudden and violent impressions, and seizes hold of the mind with overwhelming and irresistible force: and this not only at the first moment; but its effect increases on reflexion, and deepens as we contemplate it.

The arts of design possess this quality in common with poetry and eloquence. There is scarce any species of it to which Michel Angiolo and Raffaelle have not attained; and the testimony of contemporary authors, as well as those monuments of art which have come down to our times, sufficiently prove that the ancient artists possessed in an eminent degree the power of embodying the sublime both of character and sentiment. The divine majesty of Jupiter, and the divine wisdom of Minerva have been rendered quite sublime in their sculptured representations of those deities. With respect to modern artists, they do not seem quite so well to have hit this particular power. Their attempts at embodying the divinity must certainly be admitted not to be happy. An object may be said to be *sublime* either with reference to its own intrinsic grandeur or to the circumstances in which it is presented. The first we may denominate *essential*, the latter *accidental* sublimity. There are objects and ideas which it is sufficient to know or to perceive, in order to admire; on the contrary, others require some peculiar combination, some extraordinary arrangement of circumstances, to entitle them to this species of commendation.

The artist of the sublime is not uniformly true to nature. The circumstances in which he finds himself should contribute largely to the development of his genius. The highest aspirations of an artist may be checked and beaten down if he finds himself surrounded by low and ignoble objects. Simplicity eminently appertains to the sublime: simplicity of intention, of action, and of means. Energy and grandeur are also constituent parts of it; while unity of intention produces unity of sentiment and of action. Generally speaking, fewness of objects, absence of complication in the disposal of those objects, an undivided light, a simple style of colouring, and a general accord and harmony of parts—these are the means employed in art towards the production of a sublime effect.

As applied to architecture, vastness itself sometimes constitutes this charm. Unity of design is almost inseparable from it here also. No building can be considered sublime, however extensive, if it is separated into an immense number of small parts, having no immediate connexion with each other—if its ornaments are in a petty taste, or its style barbarous or fantastical. One of the sublimest architectural effects to be seen in this metropolis is the noble cathedral of St. Paul's lighted up by the soft and romantic radiancy of the silver moon.

On the *sublime* in general, we may consult, in the first place:—LONGINUS *on the Sublime*, which exists in a variety of editions. One of the best is that of Toup, Oxford, 1778, 4to. BURKE'S *Philosophical Inquiry into the Origin of our Ideas of the Sublime and the Beautiful*, London, 1757, 1772, and 1787, 8vo. A French translation appeared at Paris, in 1765 in 12mo. The 2d chapter of the 1st part of the *Essay on Taste*, by A. GERARD. The 4th chapter of HOME'S *Elements of Criticism*. The 4th, 5th, and 6th chapters of the 2d book of the *Art de sentir et de juger en Matière de Goût*, page 112, &c. of the edition of 1788.

On the *sublime*, as relates more particularly to the arts of design, we may cite:—*An Essay on the visible Sublime in the Arts of Design* (in German), by J. P. MELCHIOR, Manheim, 1781, 8vo. RICHARDSON, in his *Treatise on Painting*, 1st vol. and p. 182, in the edition of 1728. *Considerations of* HAGEDORN *on Painting*, p. 535; and above all the *Laocoon* of LESSING, of which M. VANDERBOURG has given a capital French translation, Paris, 1802, 8vo. We know not how to recommend this latter work too strongly.

SUDATIO. [Lat. from *sudor*, sweat.] *In archaiology.* See LACONICUM, BATH.

SUGGESTUM. [Lat.] *In archaiology.* The tribunes upon which were seated the emperor and prætors. Julius Cæsar was the first who introduced for it the shape of a table-bed or *triclinium*. Hence it obtained also the appellation of *pulvinar;* and this article the succeeding emperors always used at the theatres, while the prætors adhered to the old fashioned *suggestum*. The *pulvinar* of the emperors is portrayed on many ancient monuments. When they were represented, as on the Trajan column, &c. delivering harangues to their soldiers, they were always seated on the *suggestum*.

SUPPLE. [Fr. *souple*.] *In all the arts.* A praiseworthy quality opposed to hardness or inflexibility. It is to be sought in contours, in attitudes, in adjustments, and in fact in all the parts of composition. The contours should be sinuous, flowing; the attitudes easy and unconstrained; the adjustments natural; the compositions various. The term is more strictly applied to the movement of contours, the flow of draperies, &c. than to the general ordonnance of a work.

SUPPLIANT. [Fr. or Lat. *supplicans*, from *sub*, under, and *plico*, to bend.] *In painting.*

&c. Several passages of the ancient authors, as well as monuments of art, inform us that suppliants were in the habit of bearing olive branches, and of touching the knees and chin of those whose assistance they invoked. On a beautiful Greek vase, published by Millin, in his *Monumens Antiques Inédits*, 2d vol. 49th plate, we see Orestes before the statue of Minerva. He holds the olive branch tied round with bands of white wool. Upon another, published by the same person (1st vol. 29th plate), Apollo and Minerva are introduced rescuing from the besetting furies an olive branch which Orestes had hung up to the former deities in quality of supplicant.

SURBASEMENT. [*surbaissement*, Fr.] *In architecture.* The trait of any arch or vault which describes a portion of an ellipsis.

SURCOAT. [*surcot*, old Fr. upper garment.] *In costume.* A rich vestment worn by ladies above their other robes. It afterwards designated a sort of vestment worn over their mantles by the knights of the star. Thus the term was applied indiscriminately to the upper garment both of males and females. According to Ducange, the surcoat usually descended no lower than the waist, but the ladies occasionally had it made much longer. In the 1st vol. and 1st article of Millin's *Antiquités Nationales*, Isabel of Bavaria, wife of Charles VI. is represented wearing a very long surcoat without sleeves, and having on the stomach two very long separate pieces, which formed a fold at the girdle or waist.

SUSPENSION BRIDGE. See BRIDGE.

SVELTE. [*svelto*, Ital.] *In painting.* A term to express that which is executed in a light, graceful, and delicate manner: it is opposed to a taste or style heavy and lumbering. The word is not however much practised, at least on this side the water. Both in Italy and France it is common.

SWORD. [Sax. *sweord*, Dutch.] *In military costume.* The most ancient form of the Greek sword which is traceable by help of monuments of art (among others upon Greek vases) is that of a spear-head. The blade was short and swelling in the middle, and probably, in order to make a lance, they were accustomed merely to fix this sword to the end of a staff or baton. It is evident from these relics of antiquity that the Greeks carried their swords under the left axilla, or arm-pit, very high and almost in a perpendicular position. The scabbard was adorned, in different instances, with pieces of gold or silver, or with sculptured figures. These weapons were often made of brass. Their heroes frequently carried with them one and sometimes two lances, but never bore the naked sword except when engaged in the combat. We find Orestes generally represented carrying a naked sword, it is true; but then, after his murder of his mother, he is always held by the poets and artists to be pursued by Furies. Subsequently, the Grecian swords were made of greater length. Antiquaries commonly bestow the name of *parazonium* on antique swords. See PARAZONIUM. The Lacedæmonians used crooked swords by way of foils; but these were so very short that Plutarch reports a wag to have observed that any mountebank might readily swallow them. Upon ancient monuments, the people usually denominated *strangers* by the Greeks, and *barbarians* by the Romans, are armed with crooked swords. Up to the period of the wars of Hannibal, the Romans appear to have made no innovations upon the shape of the Grecian sword; but after that, they adopted the form of those used among the Celtiberians. This instrument was never worn by them except with the military habit; and in cases of surrendering as prisoners, or yielding submission to any great potentate, it was customary, as in modern times, to tender the sword. The lictors were charged to take away the swords of all those who accosted the emperors; indeed it was considered a capital crime to approach their presence with a naked sword even through forgetfulness. The sword and spear were reckoned as attributes of the prætors, and were commonly set up before them. It appears that the Romans wore their swords alternately on either side, at different epochs, and indeed often at the same, when the difference was regulated by military gradations. Polybius states it to have been generally worn on the right side; whilst Josephus says that the foot soldiers of Titus wore it on the left side and on the right a poniard. Upon the Trajan column, the swords of the soldiers, of the ensigns, and of the simple pretorians, are on the right side: those of the emperor, of the pretorian officers, of the tribunes, and of the centurions, on the left. By the trophies found on the same column, we perceive that the German swords were generally bent back. The swords of the Gauls, at the time of Brennus, were long, without point, and fell back, according to Polybius, upon the right thigh, from which they were suspended by iron chains, and sometimes by baldrics or shoulderbelts of

silver or gold. The Spaniards used very short swords, pointed, and double-edged. They had also poniards of a foot in length. The Cabinet of Antiquities belonging to the French National Library possesses many specimens of antique swords.

Upon the seals of the middle ages we very often find the sword used as emblematical of authority.

SYENITE. [from *Syene*, a town of Thebais, at the extremity of Egypt, famous for its quarries.] *In archaiology.* In a passage of Pliny, wherein he speaks of the monuments of Egypt, he states that in the environs of Syene this species of stone was plentiful and was at first denominated pyropœcilos. "It is of this stone," says he, "that the kings of Egypt caused those stupendous monuments to be erected called obelisks." See OBELISKS. Now, as we know of what kind of stone the Egyptian obelisks are composed, it is to be inferred that the syenite of the ancients was in point of fact a granite which owed its peculiar appellation to the land from whose bowels it was extracted. As to the name *pyropœcilos* it is compounded of the two Greek words πῦρ, fire, and ποικίλος, various; and evidently denotes a substance in the mixed colours of which we distinguish a fiery red. This hue is therefore predominant in the granite particularized by Pliny under the name of *syenite;* and in accordance with this, Winckelmann observes that all the obelisks have been constructed of a red and whitish granite. M. Stultz, in describing a rock composed of feldspethum and blend ore, mixed perhaps with quartz, makes the remark that M. Werner, who first distinguished it from granite, designated it, in honour of Pliny, by the name of *lapis sienus*, and that it is precisely the same substance as that employed in the construction of the beautiful obelisks to be seen at Rome. M. de Veltheim observes justly, however, that this is a mistake, and that the two stones materially differ. The ancients made use of red granite, not only in their obelisks but in columns also; and Pliny makes mention of columns of *syenite* adorning the Labyrinth. The most beautiful relic of art composed of this granite is the celebrated Pompey's Pillar. See COLUMN. In the Royal Museum of Paris are several fine columns and an elegant table likewise made of syenite. See GRANITE.

SYLVANUS. [Lat. from *sylva*, a wood.] *In mythological painting and sculpture.* This deity presided over woods and the fruits that grow there, and has therefore, on a sepulchral lamp in Bartoli, a lap full of fruit; his pruning hook is in one hand, and a young cypress tree in the other, which is mentioned by Virgil as a distinguishing attribute. He describes him as crowned with wild flowers, and as presiding over the corn-fields as well as the woods. The Fauns, a corresponding sort of woodland deities, ranged over the country, but delighted chiefly in vineyards. They are represented even eating grapes out of Bacchus's hands; and appear generally as his attendants in Bacchanal feasts and processions. The Fauns were partly of the Satyr kind, as may be seen by their short tails, little horns, and pointed ears. They have all the agility and playfulness of the satyrs, but not their savage form and lewdness. See SATYRS. The famous Faun at Florence is dancing, with some musical instruments in his hands used at the feast of Bacchus.

The chief passion as well of the Fauns as the Satyrs, was for the nymphs, though both are fabled to have had females of their own kind. The poets are not very ample in their descriptions of the persons and attributes of the Sylvans, though Nymphs and Fauns formed so common a subject with ancient artists.

SYMMETRY. [Gr. συμμετρία, from συν, *in compos*, equal, and μετρον, a measure.] *In all the arts.* Fitness of one part to another: HARMONY, PROPORTION. See these two words.

SYMPATHY. [Gr. συμπαθεια.] *In all the arts.* The meaning of this term is closely allied to that of the last, which refer to. It is more especially applied, in the Fine Arts, to the friendly and effective union of colours.

SYMPHLEGMA. [Gr. συμπλεγμα, an embracing, from συν, with, and πλενιω, to fold or join.] *In painting and sculpture.* This term is used to denote a group of persons interlaced with each other. Thus we may, according to Winckelmann, call the children of Niobe a symphlegma. Pliny gives this name to two famous groups of wrestlers; the one of Cephessodorus, of which it was said that the hands of the figures appeared rather to be buried in flesh than in marble; and the other of Heliodorus, who represented the struggle of Pan and Olympus. But this appellation of symphlegma cannot be appropriated to two figures placed by each other's side, as Gort has imagined.

SYNNADICUM or SYNNADIQUE MARBLE. See PHRYGIAN MARBLE.

SYNTHRONE. [Gr. συν, together with, and θρονους, a throne.] *In archaiology.*

Term which signifies *participating in a throne.* The ancients were in the habit of uniting two or more deities in one common worship. The striking resemblance so often found in representations of Bacchus and Hercules made this custom particularly general with regard to them. The most ancient of those relics which exhibit this alliance is the celebrated *basso-rilievo* of the Farnese Palace, since in the Museum Albani, which is accompanied with a Greek inscription.

SYRINX. [Gr. συριγξ, a pipe.] *In mythological painting and sculpture.* A nymph of Arcadia, daughter of the river Ladon. Pan became enamoured of her and attempted to offer her violence; but Syrinx escaped, and at her own request was changed by the gods into a reed, called *syrinx* by the Greeks. The god made himself a pipe with the reeds, into which his favourite nymph had been changed, and upon this pipe he is often introduced playing, in pictures.

The *syrinx*, or Pan's pipe, is frequently found figured upon ancient monuments. It is composed of seven tubes of unequal size. Ordinarily it is placed in the hands of fauns and satyrs (the followers of Pan); but is sometimes also the accompaniment of rustics. Upon the sarcophagus of Tyrania, preserved in the Museum at Arles, and of which a description and engraving are included in the 2d vol. of Millin's *Monumens Antiques Inédits* (plate 37) is depicted a syrinx in a case or box. It is occasionally found on the earlier Christian monuments as an emblem of our holy faith; the divine Founder of Christianity having been regarded as the shepherd of his spiritual flock, and the syrinx being the common musical instrument of the husbandman or shepherd.

SYRMA. [Gr. συρμα, the train of a gown, from σύρω, to drag along.] *In archaiology.* A very long tunic descending even to the heels, but which nevertheless had not an amplitude greater than the thickness of the body. See PALLA.

SYSTEM. [Gr. συστημα, from σὺν-ἵστημι, to put together.] *In all the arts.* Regularity, order, method. Fixed principles either in point of style or plan of study. In a worse sense of the term, *mannerism*, into which system, if not closely watched, runs a hazard of degenerating.

SYSTYLE. [Gr. συστλος, from συν, with, and στυλος, a column.] *In ancient architecture.* According to Vitruvius, the second method of INTERCOLUMNIATION (see that word), having two diameters between the columns.

T.

TABERNA. [Lat.] *In archaiology.* The commentators contend that Horace by the word *taberna* meant not merely what we call a tavern, but every description of shops wherein idle persons assembled to converse. The bottom of the great circus, withoutside, formed among the Romans a row of shops constructed into the most beautiful arcades. The term *tabernæ argentariæ* was applied to the shops of the bankers or dealers in all kinds of money, which Tarquin the elder caused to be built round the Forum. The shops of the librarians were in the street *Argiletæ*, opposite the Palatine Mount. This is the reason why Martial calls them *tabernæ argiletæ.* After the murder of Virginia by her father, the shops or stalls of the butchers were destroyed and replaced by others, which were denominated *tabernæ novæ.* The Romans designated by *tabernæ niviariæ* the icehouses wherein they kept ice during the summer months for purposes corresponding with our own.

TABERNACLE. [*tabernaculum*, a tent.] *In ancient architecture*, &c. A kind of building among the Hebrews, somewhat in the form of a tent, set up by express command of God, for the performance of religious sacrifices, &c. during the journeyings of the Israelites in the wilderness; and made use of after their settlement in the land of Canaan, for the same purpose, until the erection of the temple at Jerusalem.

It was divided into two parts: The one covered, and properly called the *Tabernacle;* the other open, called the *court.* The curtains which covered the tabernacle were made of linen, of several colours, embroidered. There were ten curtains, twenty-eight cubits long, and four in breadth. Five curtains fastened together made two coverings, which covered up all the tabernacle. Over these were two other coverings; the one of goat's hair, the other of sheep's skins. The "holy of holies" was parted from the rest of the tabernacle by a curtain made fast to four pillars, standing ten cubits from the end

The length of the whole tabernacle was thirty-two cubits; that is, about fifty feet; and the breadth twelve cubits, or nineteen feet. The court was a spot of ground a hundred cubits long, and fifty in breadth, enclosed by twenty columns, each twenty cubits high and ten in breadth, covered with silver, and standing on copper bases, five cubits distant from one another, between which there were curtains drawn and fastened with hooks. At the east end was an entrance twenty cubits wide, covered with a curtain hanging loose.

Tabernacle, in modern language, is applied to designate a small edifice constructed of marble or sometimes of precious stones, in form of a small temple, generally placed upon the altar in Roman Catholic churches or chapels, and employed to enclose the sacred vases, &c.

TABLE. [Lat. *tabula.*] *In archaiology, &c.* A movable piece of furniture, usually made of wood or stone, and supported on pillars or the like, for the commodious reception of things placed thereon.

As a decoration of architecture the word table is applied to a part of the wall united and smooth, ordinarily of a square or rectangular form.

The Romans displayed great magnificence in respect to the tables with which they adorned their halls and other apartments. The greater part were made of cedar wood, drawn, according to the testimony of Pliny, from Mount Atlas. They employed also at times a still more precious wood called *lignum citrum*, which was not the same as our citron wood, but that of a tree much more scarce even then, and now unknown. None but the most wealthy individuals, however, were enabled to have tables of this valuable description. The high price of the Roman tables was in a great degree occasioned by the circumstance of their being very richly ornamented. As to their bases a table with but one foot was denominated MONOPODIUM (which word see), that with two was called *bipes*, that with three *tripes*. All served, alike, for the purposes of repast. The form of these tables varied greatly. Some were square, some long, others oval, &c. according to the prevailing fashion. Under the reigns of Theodosius and Arcadius we find the horse-shoe, or demi-crescent shape much adopted. See SIGMA. After having finished their meal, the table was covered with a sort of counterpane or mattress, that it might be fitted for the guests to repose upon. At top, among the more opulent citizens, the tables were frequently covered with bronze and indeed with silver. The feet were sometimes cased with silver, sometimes adorned with ivory, and the artists often applied to them the form of CARYATIDES, of ATLANTES, of GRIFFINS, SPHINXES, &c. (See those words.)

We may remark, in conclusion, that the ancients seldom made use of tables to write upon, having been accustomed, when they wrote, to hold their tablets upon their knees.

TABLET. [from *table.*] *In archaiology.* Those tablets of stone or metal employed in the most ancient times as matters whereon to write, were by no means all of them portable; and for letters which were to be transported from one place to another, it was necessary to have recourse to another invention. Tablets were introduced made of wood. Plutarch and Diogenes Laertius teach us that the laws of Solon were inscribed upon tablets of wood called *axones*. Previously to the introduction of bronze, which subsequently became very common for the purpose, the Romans were accustomed to use oaken tablets, which they sometimes denominated *schedæ*. The general name for these articles, however, was *tabulæ*. They were usually covered with wax or plaster either green or black, and sometimes pitch was mixed with the other materials. The instrument with which they wrote thereon was the STYLE. See that word. The characters were easily effaceable; and this facility affording the ancient authors opportunities abundant for polishing and revising their compositions, the use of wooden tablets was perpetuated for some time after the introduction of paper and parchment. They were in the habit of making their rough draughts on the tablet and then causing it to be copied out clean upon parchment or paper. After awhile it became necessary to renew the composition beforementioned with which the tablet was prepared. Those specimens which remain to us appear either black, or of a green so dark as to be scarcely distinguishable from black. When these tablets were dispatched by way of epistle, they were tied round with a flaxen string, and the seal of the writer was stamped upon the knot. See DIPTYCHUS.

TABLINUM. [Lat.] *In architecture.* Name of a chamber in the houses of the Romans, which was situated in the narrow part of the *atrium*, fronting its entrance. Vitruvius did not indicate, it is true, this exact position precisely; but he leaves abundant room for the inference.

The following may be considered as

nearly the usual mode of distribution. The part which first presented itself was the VESTIBULUM (see that word) or what we call the portico; passing this you entered the ATRIUM (which refer to) or hall, at the extremity of which was the *tablinum*, or repository for books, records, &c.: from the sides of the atrium you passed by *alæ*, or aisles, to the *cavædium* (see CAVÆDIUM), which was an open court, surrounded by a portico, or piazza, at the extremity of which was the basilica, or place to administer justice, &c.

TABULA. [Lat. a board or plank.] *In archaiology.* The Romans designed by this term not only a finished picture, but also the board on which it was painted. They employed for these artistical purposes, above all other, a wood called *larix femina*, a species of pine the wood of which is not apt to split readily, nor to become worm-eaten. It also resisted for a long time the attack of fire.

The painters for a long while retained the habit of employing wood. Cranach, Holbein, Durer, and Raffaelle himself, and indeed almost all the most celebrated masters, have occasionally painted thereon.

Tabula was likewise the Latin word for TABLE, which refer to.

TABULATUM. [Lat.] *In the archaiology of architecture.* This term signified, amongst the Romans, not only the floors, cielings, wainscoting, &c. made of joinery, of a house, but also the balconies and other projections.

TALARIA. [Lat. from *talus*, the ankle.] *In mythological painting and sculpture.* Name given to the wings attached to the heels of Mercury.

TALC. [Sax.] *In painting, &c.* A species of fossil composed of *lamina* or plates, more or less flexible and transparent. Its substance is soft to the touch, and its fragments leave whitish traces.

There are two varieties of this earth; the Venetian and the Muscovite. The former has not received its name so much from being the produce of the Venetian territority as from being an article of Venetian commerce. It abounds in England, Norway, Hungary, Bohemia, Spain, and many countries of Asia. Venice talc, with half its weight of alkaline salt, may, in a strong fire, be brought into perfect fusion, though not to perfect transparency: with equal its weight, or less, of borax, it runs into a beautiful, pellucid, greenish yellow glass.

Muscovy talc, called likewise *lapis specularis*, is found in many parts. The island of Cyprus abounds with it. It is very common also in Russia, and has of late been discovered to abound in the Alps, the Apennines, and many of the mountains of Germany. It is imported in large quantities into England, and is used by lantern-makers, instead of horn, in their nicer works; by painters to cover miniature pictures, &c. The ancients used it instead of glass in their windows. A variety is likewise employed, reduced into the quality of an oil, in oil paintings.

TALEA. [Lat.] *In archaiology.* The name given to those shapeless pieces of silver which, previously to the invention of recognised coins, were passed in exchange for such commodities as the purchaser was desirous of possessing.

TALENT. [Lat. *talentum.*] *In all the arts.* Peculiar aptitude to any given art or pursuit. General ability and cleverness, whether natural or acquired. See GENIUS.

TALISMAN. [Gr. τελεσμα.] *In archaiology.* Pieces of metal, or stones, charged with certain characters to which superstition was wont to attribute extraordinary virtues. Some authors have attributed their invention to Apollonius of Tyana, but we suspect that their origin stretches back to a far more remote period. At the time of Aristophanes the commerce in these talismans must have been extremely general; he makes mention of several fabricators of them. We find also, from passages in Gallienus and Marcellus Empiricus, that there was great confidence universally placed in their virtues. According to Pliny, the opinion of the multitude was that Milo of Crotona owed his victories alone to these kind of stones, which he bore in the combats; and after this example, the candidates in athletic encounters used to supply themselves therewith. The golden bull suspended from the neck of the generals in the ceremony of the triumphs enclosed talismans, *remedia quæ credunt contra invidiam valentissima*, as Macrobius says. They hung similar charms round the necks of infants, to preserve them from evil genii and other perils. The Roman women often carried talismans in their rings, and other ornaments. The head of Medusa was frequently engraven on different parts of armour, in order to serve as a talisman. The best manufactured articles of this kind were held to come from Samothracia, where they were fabricated with due solemnity according to the varying influences of the stars.

TALON. [Fr.] *In architecture.* A *cyma reversa.*

TAMBOUR. [Fr.] or DRUM. *In archaiology.* This musical instrument, denomi-

nated τυμπανον by the Greeks, and tympanum by the Romans, is found among almost all the dances and processions of Bacchanals, and was still more peculiarly employed by the worshipers of Cybele. Its shape and structure very nearly resembled those at present in use, and it was beaten sometimes with the hands alone, and at other times with drumsticks.

TANTALUS. [Lat. from Gr. τάλαντατους, superlative of ταλας, wretched.] *In mythological painting and sculpture.* Tantalus is represented as hanging over the waters, which are always flowing through his hand and gliding from him. Disappointment, and a sort of stupidity the consequence of being so perpetually baulked, are marked in his features. From some such representation, Horace compares the self-inflicted tortures of a miser to those of Tantalus. He seems also to have been depicted as standing under a tree, with ripe fruits hanging just before his mouth, which, when he attempts to pluck them, move away out of his reach; and in other instances, with a huge stone over his head, just ready to fall upon him.

TAPESTRY. [*tapisserie*, Fr.] *In painting, embroidery*, &c. A kind of woven hangings of wool and silk, frequently raised and enriched with gold and silver, representing figures of men, animals, landscapes, historical subjects, &c.

This species of curtain-covering for walls was known among the inhabitants of eastern countries at an extremely remote era. The most grotesque compositions of men, animals, plants, &c.; the most fantastic combinations and heterogeneous mixtures, were commonly selected for the display of the talents of workmen in this department of oriental art, which was, in common with all the other branches of the fine or the useful arts, afterwards imported into Greece. It is from these *bizarre* compositions that the elegant Greeks took their ideas of those half-fabulous creatures—griffins, centaurs, &c. These Persian or Babylonian tapestries were known by the appellation of *barbarian*, to distinguish them from the curtain more peculiarly in use amonst the Greeks, and called πεπλον. See PEPLUM.

At length the refined taste of Athens became visible in the structure and adornments of tapestries. The old grotesque combinations no longer, as formerly, covered their surfaces; but were confined to the borders only: and the centre received the impress of more regular and systematic representations.

In modern times, this description of embroidery has been executed with very great success, and has often called forth the talent for design of the greatest masters in the art of painting. At the same time it must be confessed that these cannot challenge equal praise with the oriental specimens for brilliancy and variety of colours. In Flanders, more particularly, during the fifteenth and sixteenth centuries, the art was practised with uncommon skill, and many examples might be cited—above all, the tapestries which were executed there after the masterly designs of Raffaelle in his invaluable Cartoons.

This art was brought into England by Wm. Sheldon, near the end of Henry VIII's. reign. In 1619, a manufacture was established at Mortlake, in Surrey, by Sir Fras. Crane, who received £2000 from James I. to encourage the design. The first manufacture of tapestry at Paris was set up under Henry IV. in 1606 or 1607, by several artists whom that monarch invited from Flanders. But the most celebrated of all the European tapestry manufactures was that of the *Gobelins*, instituted under Louis XIV. which sent forth very beautiful cloths, remarkable for strength, for elegance of design, and happy choice of colours. The finest paintings were copied, and eminent painters employed in making designs. For a long while Gobelin tapestry was the most costly and favourite method of hanging the walls of chambers: but the revolutions of fashion have wrought a great change in this as in other respects; and the stately productions of the Parisian workmen have given way to the exertions of the paper-hanger, carver, or housepainter.

TASTE. [Dutch.] *In all the arts.* That faculty of the mind by means of which we perceive and enjoy whatever is beautiful or sublime in the works of Nature and Art. Like the taste of the palate, this faculty relishes some things, is disgusted with others, and to many is indifferent; and from these obvious analogies between it and the external sense it has obtained its name.

A fine taste is formed and strengthened by reflexion, study, and comparison. It is his *taste* which decides the painter in the choice of a subject; and hence we may learn if this taste is bad or good. It is impossible however to fix limits or a standard to this quality, inasmuch as the minds and perceptions of men are infinitely various. Generally speaking, as regards the Fine Arts, that may be called tasteful which is natural and graceful, or which produces the greatest effect by the fewest and simplest means. Good

taste may be evidenced alike in the most and in the least important parts of a work of art; and although, strictly speaking, it is undefinable, yet there is a sort of freemasonry among men of cultivated intellects by which it is at once detected and appreciated. We have said that an artist is influenced by his taste, or relish, in the choice of a subject: we may also say, that it is the same governing principle which generally incites him to the pursuit of the art itself, to the particular *branch* of it which he practises, and to the peculiar *style* predominant in his performances.

These varieties of *taste*, as regards painting, are commonly enumerated: *natural*, *artificial*, and *national*. The first mentioned, namely that with which an artist appears to be originally endowed, is perhaps in most instances the one which clings to him in a greater or less degree throughout life; although it is usually modified by acquaintance with the world, by thought, and by observation of the works of others. Sometimes, however, and more particularly in men of decided genius, we find the original or natural taste, very little interfered with, still governing and predominating over every other, and impelling the individual forward even against a stream of opinion and precedent which might have borne weaker minds away with it. We would not, at the same time, wish to encourage this predisposition too strongly, since experience is constantly suggesting subject matter for improvement, and the limited faculty of the human being in his earliest years is, except in a few favoured instances, but a blind guide to pursuits or principles which are to stand the wear-and-tear of life.

The second description of *taste*, therefore, is perhaps the safest and the most just; namely, that which is *acquired* as the mental faculties develop themselves, and as the individual begins to appreciate duly the differences of things around him. A thousand impressions made upon the plastic substance of the mind, and, although fleeting, treasured up in the mysterious cells of the memory, and subsequently turned to account, conduce to form this taste, which may be resembled to the perfect building, of which nevertheless the natural taste is the foundation-stone.

The last of the three great varieties, termed a *national* taste, is the result of those peculiarities which generally are found to separate one distinct nation, using the same language, and living under the same forms of society, from another; and as such may reasonably be expected to possess considerable influence, and to be readily traceable in the works of the several artists.

Among the numerous works on taste in general, we may cite, in the first place, that which L. A. Muratori published under the fictitious name of *Lamindo Pritanio*, and which is entitled, *Riflessioni sopra il buon Gusto, intorno le Scienze e le Arti*, Venice, 1708 and 1717. Juan Sempre y Guarinos published at Madrid, a Discourse on the Actual State of the Spaniards in Literature; and he likewise treated of taste in the first book of another of his works entitled, *Della perfetta Poesia*. At the commencement of the translation of certain comedies of Aristophanes, Mademoiselle Dacier has placed a digression on taste, which she defines to be *harmony* or *agreement* between wit and reason. The 3d of the *Entretiens Galans* treats likewise of the same subject; styling it the *clearness of the reasoning faculty inciting to a just choice the enthusiasm of the heart*. *Lettres sur le bon Goût, sur les Moyens de le régler, et sur les Différences du Goût*, by the Abbé Bellegarde, in his *Lettres curieuses de Littérature et de Morale*, and in his *Lettres Choisies de* M. M. de L'Académie Franç. Paris, 1708, 12mo. *Manière de bien penser dans les Ouvrages d'Esprit*, by the Père Bouhours, Paris, 1684, 4to. and 1771, 12mo. *Discours sur le bon Goût*, by J. F. Du Tremblay, Paris, 1713, 12mo. *Réflexions générales sur le Goût*, by Rollin, in his *Manière d'enseigner et d'étudier les Belles Lettres*. *Essai historique et philosophique sur le Goût*, by Cartaud de la Villate, Paris, 1736 and 1751. Batteaux, in the 1st vol. of his *Cours de Belles Lettres*. *Lettre de* J. B. de la Curne de Sainte-Palaye, to M. Bachaumont, *sur le bon Goût dans les Arts et dans les Belles Lettres*, Paris, 1751. The article *Goût* in the French Encyclopædia, which is by Voltaire. *Réflexions sur l'Usage, et sur l'Abus de la Philosophie en Matière de Goût*, by D'Alembert, in the 4th vol. of his *Melanges*. *L'Art de sentir et de juger en Matière de Goût*, by the Abbé Seran de la Tour, Paris, 1762. *Discours et Réflexions sur le Goût*, by Formey; found in his *Essais sur le Beau*, Amst. 1761. *Dissertation sur le Goût*, by Le Cat, in the new *Memoirs of the Academy of Berlin*.

Among German authors, Thomasius was the first who wrote on Taste. Besides him are:—*On the Influence and Use of the Imagination, and on the perfecting of Good Taste*, by J. J. Bodmer, Frankfort, 1727. *De Morum Vi ad Sensum Pulchritudinis, quam Artes sectantur; auctore* Chr.

Goût. HEYNE, Gottingen, 1763. *Treatise on the Influence of Manners upon Language and Good Taste*, by G. I. FINDEISEN, Berlin, 1768. In the *Revision of German Literature*, is a *Treatise on the Taste of the present Day*, Manheim, 1776. The 19th chapter of the *Philosophy of the Fine Arts*, by KÆNIG, treats principally of *Taste*. In the 2d vol. of the *Theory of the Fine Arts*, by SCHOTT, we likewise find an entire chapter on the nature of taste; and the 3d vol. of the *Criticism on the Faculty of the Judgment*, by I. KANT, discourses almost entirely on the same subject.

Among the works on Taste in our own language are the following:—In the *Essays and Treatises* of HUME, those articles entitled—*Of the Standard of Taste;* and *Of the Delicacy of Taste. Letters concerning Taste*, by COOPER, London, 1753. *Essay on Taste*, by Alex. GERARD, Edinburgh, 1789. *Clio*, a Discourse on Taste, London, 1766. *A Treatise on the Origin of our Ideas of the Sublime and Beautiful*, in the *Philosophical Inquiries* of HARRIS, London, 1772. *Lælius and Hortensia*, or *Thoughts on Taste and Genius*, Edin. 1782. *Of Taste and its improvements*, in BEATTIE'S *Dissertations Moral and Critical*, London, 1783. *Essay on the Taste for the general Beauties of Nature, and Essay on a Taste for the Fine Arts*, by T. PERCIVAL, in his *Moral and Literary Dissertations*, London, 1784. The 7th section of *Essays on the Intellectual Power of Man*, by REID, Edin. 1785. *Attempt to show that a Taste for the Beauties of Nature and the Fine Arts has an influence favourable to Morals*, by S. HALL, which together with another tract, *On the Pleasure which the Mind receives from the Exercises of Taste in particular* (by C. POLIER) are to be met with in the 2d vol. of *Memoirs of the Literary and Philosophical Society of Manchester*, London, 1785. *Discourses* of Sir Joshua REYNOLDS. *Inquiry into the Principles of Taste and the Origin of our Ideas of Beauty*, London, 1790. *Essays on the Nature and Principles of Taste*, by A. ALISON, London, 1790.

With respect to the history of taste, and its decline from the purity of the ancient:—*Esprits des Beaux Arts*, or *Histoire raisonnée du Goût*, by P. ESTEVE, Montpelier, 1753, 2 vols. 12mo. *Causes of the Decline of Taste among different Nations* (in German), by HERDER, Berlin, 1775. *Del Gusto presente nella Litteratura Italiana, Dissert.* del D. Matteo BORSA, *accompagnato da copiose Osservazione da* Stef. ARTEAGA, Venice, 1784. *Discorso sul Gusto presente della Belle Lettere d'Italia*, by J. PINDEMONTE, to be found in his *Volgarizzi dell' Inno a Cerere*, Bass. 1785. *Dell Carattere nazionale del Gusto Italiano*, Milan, 1785. *Lettres sur la Naissance, les Progrès, et la Décadence du Goût en France*, by Remond de SAINT-MARD in his *Réflexions sur la Poésie*, Paris, 1733. *Quelles sont les Sources de la Décadence du Goût?* by the Abbé LASERRE, Nismes, 1768.

The following works relate to the principles of taste as applied to the fine arts exclusively:—*L'Idea del perfetto Pittore, per servire di Regola nel Giudizio che si deve formare intorno all' Opere de' Pittore*, Venice, 1771, 4to. *Dell' arte di vedere nelle belli Arti del Disegno, secondo li principi di* SULZER, e di MENGS, Venice, 1781. *Sentimens sur la Distinction des diverses Manières de Peinture, Dessin et Gravure, et des Originaux d'avec leurs Copies*, by BOSSE, Paris, 1649, 8vo. *Conversations sur la Connoissance de la Peinture, et sur le Jugement qu'on doit faire des Tableaux*, by DE PILES, Paris, 1677. *Manière de bien juger des Ouvrages de Peinture*, by the Abbé LAUGIOR, Paris, 1771. *Two Discourses and Essays on the whole Art of Criticism, as it relates to Painting, and in behalf of the Science of a Connoisseur*, by RICHARDSON, London, 1719. *Thoughts on Beauty and Taste in Painting* (in German), by WINCKELMANN, Zurich, 1762. *Dictionnaire des Beaux Arts*, by SULZER, the work under the same title by MILLIN. *Dictionary of Painting*, by WATELET, &c. &c.

TECHNICAL. [Gr. τεχνη, art, from τέχω, to produce.] *In all the arts.* That method of speaking which is proper, or peculiarly appertaining, to any given art. Artists and amateurs are accustomed, when they talk of matters relating to the arts, to employ many expressions which are not introduced into ordinary language, or at least do not bear the same signification. This species of conversation is not without its advantages. The terms it employs are often arbitrary, but they are much clearer than any other would be to the artist or connoisseur, inasmuch as he has habituated himself to combine with them, and with them alone, the ideas meant to be conveyed; and they besides often save a round-about way of expression. But this stated, we are bound to add that they should never be introduced into books, excepting only such as are addressed *specifically* to the practisers of our art; for in any work designed for the purposes of *general* information, they merely tend to mystify and confuse the reader; save when, as for instance in the case of this Dictionary, they are introduced for the sake of being explained.

TECTORES. [Lat.] See CURATOR.

TECTORIUM or TECTORIUM OPUS. [Lat. from *tector*, a plasterer, which from *tego*, to cover; *opus*, a work.] *In archaiology.* The Romans applied this name to the stucco or plaster with which they covered the cielings and walls in the interior of their apartments. The *tectorium* differed from the ALBARIUM OPUS (which refer to), which was whiter and finer. It was composed of a mixture of lime and sand.

TELAMONES. [Gr. from ταλάω, to sustain.] *In ancient architecture.* The figures of men which similarly to CARYATIDES (which see) support the weight of a cornice, &c. Sometimes these statues are denominated ATLANTES (which refer to).

TELLUS. *In mythological painting and sculpture.* Tellus, or the genius of the earth, is always represented in a reclining posture, like the river gods. The only considerable description relating to this goddess is in Ovid's account of the fall of Phaeton. Tellus is sometimes represented with a globe *(orbis terrarum)* in her hand; and sometimes the *orbis* (or world) itself is personified, as on a medal of Gallienus, where it appears under the figure of a naked man, kneeling on one knee, and the emperor giving him his hand to raise him up.

The figures of Tellus are often to be met with on gems, where Sol is setting out in his chariot; and on sarcophagi, where Tellus and Oceanus are often in the front, to signify that the dead person was returned to his first elements.

TEMPEST. [Lat. *tempestas.*] *In painting and perspective.* M. Valenciennes, in his *Elemens de Perspective pratique*, makes, on this subject, the following observations: "In the tempest, the waves of the sea are brown, green, and frothy. They burst over each other; and when, pressed by the violence of the winds, they rush to encounter a body capable of opposing resistance to them, the impulse becomes terrible from their force and dimensions. The rocks which border the shores, the thick moles which protect the seaports,—neither can arrest the fury of these breakers; they shiver against the powerful barriers, and throwing up their foaming billows overleap the piers even to a considerable distance; while the temporary illuminations of the lightning serve only to develop the horrible abysses which seem to threaten the engulfment of all surrounding objects.

"When there is no lightning or rain, and the awful scene is lighted up perchance by the splendour of the gentle moon, then the waves receiving the luminous rays of that body appear bordered with silver, and take the character of immense sheets of crystal. That part of them which is left unradiated presents nothing but a tone of greenish black, very strong, and with bluish reflections upon the different inequalities of the wave. Rocks, vessels, and all other bodies which are sustained upon or surrounded by the waters, are of the deepest tone, and combine to present a contrast the most poignant and picturesque."

TEMPLE. [Lat. *templum.*] *In architecture.* Edifices destined for the performance of public worship. Various etymologies have been suggested for the Latin word *templum.* Some derive it from the Greek τεμενος, the meaning of which was the same; others from τεμνω, *abscindo*, "I cut off, or separate," a temple being a place abstracted and set apart from other uses. Others again, perhaps with more probability, do not go to the Greek at all, but seek the root of the word in the old Latin verb *templare*, to contemplate. The ancient augurs undoubtedly applied the name *templa* to those parts of the heavens which were marked out for observation of the flights of birds. Temples were originally all open, and hence indeed most likely came their name.

These structures may be regarded as among the most ancient of monuments. Amongst every people, they formed the first built and the most noticeable of public edifices. As soon as a nation had acquired any degree of civilization, they took care to consecrate and appropriate particular spots to the worship of their deities. In the earliest instances, they contented themselves with erecting altars either of earth or ashes in the open air, and sometimes resorted for the purposes of worship into the depths of solitary woods. At length they acquired the practice of building cells or chapels, within the enclosure of which they placed the images of their divinities, and assembled in order to offer up their supplications and thanksgivings as well as sacrifices. These were chiefly formed similarly to their own dwellings, The *Troglodites* adored their gods in grottoes; the people who lived in cabins erected edifices, the form of which was more or less assimilated to that species of of habitation. Clemens Alexandrinus and Eusebius refer the origin of temples to the sepulchres built for the dead; and this notion has been latterly illustrated and confirmed from a variety of testimonies by Mr. Farmer, in his *Treatise on the Worship*

of Human Spirits, p. 373, &c. Herodotus and Strabo contend that the Egyptians were the first who erected temples to the gods; and the one first erected in Greece is attributed by Apollonius to Deucalion. (Argonaut. lib. iii.) The temple of Castor was built upon the tomb of that hero.

According to Pausanias, the oracle of Delphos, in remote ages, was consulted in a kind of arbour formed of laurels. That of Jupiter, at Dodona, rendered, at a similar era, its oracles by an old oak, as we learn both from Pausanias and Herodotus. In the vicinity of Magnesia, upon the Mæander, was a grotto consecrated to Apollo, wherein was to be seen a very ancient statue of that god. When the Greeks, at a subsequent period, surpassed all other people in cultivation of the arts which they had introduced from Phœnicia, Syria, and Egypt, they appropriated a considerable portion of time, care, and expense to the building of temples and rendering them every way worthy their destination. No country has ever surpassed, or perhaps equalled them, in this respect; the Romans alone, indeed, may be said, every thing considered, to have at all successfully rivalled them, and they took the Greek structures for models.

In every city of Greece, as well as in its environs, and in the open country, was a considerable number of sacred temples. It is not therefore matter for surprise that the ruins of this description now existing should greatly exceed those of any other kind of building; and still less so when it is recollected that the best materials and the utmost attention were uniformly employed upon the Grecian and Roman temples, which were thus much better enabled to resist the injuries of time. The particular divinity who was held to preside in chief over each several town had always the most elegant and costly temple therein especially dedicated to him or her. Instances of this are to be found in the temple of Minerva, at Athens; that of Diana, at Ephesus; of Apollo, at Delphos; of Jupiter at Olympius; of Venus, at Paphos and Cytherea; and of Jupiter Capitolinus, at Rome. The temples constructed in the provinces chiefly appertained to the gods of the country or to those common to the several communities. At Panionium was a temple of Jupiter Heliconius, erected by the Ionian colonies imported into Attica from Asia Minor. The Dorian colonies of Asia Minor had likewise a common sanctuary, the temple of Apollo Triopius. Near to Mylassa was a temple sacred to Jupiter Carius, and common to the Carians, the Lydians, and the Mysians. In the territory of Stratonica was the temple of Jupiter Chrysaoreus, appertaining to the Carians. In the immediate vicinity of these edifices, the people held, at fixed seasons, assemblies for the purpose of sacrificing to the gods; they also celebrated their fêtes on the same spot, and deliberated respecting the affairs of the entire nation.

We should be deceived in imagining that the most ancient Grecian temples were of great extent. On the other hand, some of them were very small. The *cella* was barely large enough to contain the statue of the presiding deity of the temple, and occasionally an altar in addition. Even in succeeding ages, when the riches and power, as well as the taste and skill of the Grecian states were augmented, this observation continues to hold good in a great degree. Their object, in fact, did not render extent necessary; since the priests alone entered the *cella*, and the people accumulated in masses without-side the walls. Exceptions indeed were made, in the examples of those dedicated to the tutelary divinities of towns, of those of the supreme gods, and of those appropriated to the common use of various communities. This increased extent was chiefly displayed in the porticoes surrounding the cella, and was again augmented by the PERIBOLOS (See that word).

Vitruvius teaches us the peculiar situations and aspects which the Greeks selected for their temples; but we are bound to state that there are numerous exceptions to his rules. According to this authority, however, the situations were regulated chiefly by the nature and characteristics of the various divinities. Thus, the temples of Jupiter, Juno, and Minerva, who were considered by the inhabitants of many cities as their protecting deities, were erected on spots sufficiently elevated to enable them to overlook the whole town, or at least the principal part of it. Minerva, the tutelary deity of Athens, had her seat on the Acropolis, so that all those who arrived in the city might behold it while yet afar off. The temples of Mercury were ordinarily in the Forum, or otherwise, like those of Isis and Serapis among the Egyptians, in the market. Those of Apollo and Bacchus were placed beside the theatres. The temple of Hercules was commonly built near the Gymnasium, the amphitheatre, or circus. Those of Mars, of Venus, and of Vulcan, had their place generally without the walls of the city, but near the gates. The temples

of Ceres were likewise placed, in most instances, outside the town in a retired and quiet place, and were visited by few persons except such as were initiated into the mysteries of her worship. The Greeks rarely placed the temples of Vesta without outside the walls, but on the contrary were accustomed to select for them the most commodious and beautiful sites. The temples of Esculapius, however, were uniformly built in the neighbourhood of the towns, on some elevated and desirable spot, where the pure air might be inhaled by the invalids who came to invoke the aid of the god of health. In order, says Vitruvius, to give to the temples the most convenient direction relatively to all the four quarters of the horizon, the architects so constructed them as to admit of the statues of the divinity in the cella being turned towards the *east,* to which quarter all those who come to pray or sacrifice likewise bent their regard. When a temple was situated beside a river, its principal façade faced the streams; a similar system was also observed with respect to such as were erected beside the public ways. Sometimes the particular spot on which the temple was erected had been pointed out by an oracle or presage. In the cities, the houses of the inhabitants clustered round the temples: from this observation, however, we must except the citizens of Sanagra in Bœotia, who separated their dwellings altogether from the vicinity of their temples, which were constructed on spots perfectly apart from the carrying on of any civic occupations.

The form most generally given to temples was that of a long square. Sometimes, however, the construction was circular. Those of the former shape had commonly for their depth or length the double of their breadth, and their *cellæ* had ordinarily, at the exterior, porticoes which sometimes adorned only the façade anterior, sometimes that also of the posterior, and occasionally was carried round all four sides. The anterior part of the temple, where the porch was constructed, and indeed the anterior façade generally, was denominated by the terms *frons* (or front) ANTICUM, PRONAOS, and PRODOMUS (See the three last words). The word *pronaos* was however chiefly limited to the porch. The posterior division, where, as on the opposite side, was an entrance with columns, bore the name of POSTICUM or OPISTHODOMUS (See those words). Over the entablature of the columns was at both the fronts a pediment. See ÆTOS, FASTIGIUM.

The principal façades of the temples were always ornamented with an even number of columns, while the sides had generally an uneven number. The former gave the denominations of TETRASTYLE, HEXASTYLE, OCTOSTYLE, &c. to the temple, according as they possessed a corresponding number of columns.

The circular form was by no means common. Those temples were generally covered with a cupola, the height of which about equalled the half diameter of the entire edifice. The most celebrated instance of the circular temple is the Pantheon of Rome; it has some peculiarities not common to its class. See PANTHEON.

Several of the very ancient Etruscan temples have an oblong shape, or one approaching to a perfect square.

In several of the ancient buildings of this character were staircases by means of which they mounted to the roof. These were constructed within the walls, by the side of the entrance fronting the *cella;* and that they might occupy less space, they were made winding: staircases of this kind were constructed in the temple of Jupiter at Olympius, in the grand temple of Pæstum, and in that of Concord at Agrigentum. The Egyptian temples had a species of openings or windows.

The statue of the divinity to whom the structure was dedicated was, as may be supposed, the most venerated and sacred object of the temple, and the most prominent ornament of the *cella.* It was in almost every instance executed by a distinguished artist, even when destined only for a small building. Several ancient authors, and above all others Pausanias, expressly say that they have discovered an abundant number of excellent statues in the various parts of Greece. In the earliest instances, these statues were constructed in *terra cotta,* and were commonly painted red. Others were fashioned in wood. In succeeding times, as the fine arts advanced, iron and bronze were occasionally substituted, but still more frequently marble (See SCULPTURE, STATUE). The primitive examples of bronze statues were not cast in one single jet, but in separate pieces afterwards joined together. Besides the statue of the presiding deity, there were generally others either in the *cella* or *pronaos,* or both, some of which had a special relation to the principal figure, whilst others served the mere purpose of ornament.

The altar on which the sacrifices were offered was placed before the statue of the divinity, a little less elevated than it, and turned towards the east (See ALTAR).

Sometimes a single *cella* contained altars raised to sundry deities.

The steps by ascending which the entrance to the temple was approached were regarded as a very essential part of the whole. They served as a base, and at the same time distinguished the building from any one of a different description.

Delightful to the eye of taste are the mysterious and solemn vistas of an ancient English cathedral: grand and majestic are the ruins of the Nerva Forum: awfully severe, impressive and overpowering is the Colosseum of ancient Rome: elegant is the circular temple of the Sibyl at Tivoli, which graces, with its endless rotunda and sweetly proportioned cupola, its own delightful surrounding country, and many of the sweetest landscapes of the tender and fascinating Claude: magnificent are the triumphal arches and aspiring columns of imperial Rome.

Yet, neither the magnificence of these triumphal structures with all their maddening associations; nor the sweet proportions of the fane of Tivoli, with the fascinations of its scenery, and the magic pencil of Lorraine; nor the grandeur of the Roman forum in its pristine perfection; nor the majesty of the Colosseum, great in ruins and sublime in dust, or filled with the whole population of a mighty city, headed by an Augustus;—are equal in majesty, dignity, awfulness, splendour, *perfection*, to the temple of the virgin goddess of the Greeks.

The arrangement of this celebrated edifice may be seen from its plan in Stuart's Antiquities of Athens; and the style of architecture, the purest and grandest Doric, from many engraved views. This temple is two hundred and twenty-seven feet* in length, which, for the purpose of immediate comparison, we take leave to mention is only one foot short of the length from the inside of the north door of the principal transept of St. Paul's, to the inside of the south door of the same transept; and one hundred and one in width, the width of the nave and aisles of St. Paul's on each side of the cupola between the walls; and sixty-five feet six inches high, to the summit of the pediment, which is somewhat higher than the bases of the composite order of columns of the second story of St. Paul's taken from the ground. These general dimensions may serve to give some idea of its magnitude; but its grandeur and sublimity is not the result of its size.

It stands upon a pavement elevated on three steps, and was surrounded by forty-six columns, thirty-four feet one inch high; eight feet in the front of each portico, and seventeen on each flank, including the angle columns. The porticoes were both surmounted by pediments filled with statuary, of which some of the most glorious remains, which have immortalized the name of Elgin, and do honour to the British legislature, form that collection at the British Museum which Canova declared was alone worth a journey from Rome to see, and which formed an epoch in his style.

A contemplation and examination of this wonderful structure, in all its bearings, would occupy too much space (see PARTHENON); and we will proceed to an examination of the principles of the style and elements of the sacred architecture of the Greeks; another fine example of which is the temple of Jupiter Panellenius, in the island of Egina, which was recently discoverd by Messrs. Cockerell, jun. Foster, Linckh, Baron Haller, and others; than which discovery of Grecian architecture and sculpture none of modern times can be considered as more extraordinary, or more interesting and important to the history of art. It is only to be regretted that, having been discovered partly by English travellers, its sculptural remains do not grace our national museum, as well as those of Athens and Phigaleia.

The inhabitants of the island of Egina were the first European Greeks who became considerable for their intelligence in maritime traffic. Pausanias relates, that soon after the return of the Heraclidæ into Peloponnesus, the Eginetans had much commerce in Greece. Ælianus, Strabo, and other authors, believe that the builders of this beautiful temple were the first among the Greeks who brought coined money into use.

The power of the Eginetans was destroyed, after a short but brilliant career, by the Athenians, in the time of Pericles, who drove them from their island, and annihilated their wealth and their power in a moment.

The sculptures of this fine temple are now at Munich, and are the property of the Prince Royal of Bavaria. They were discovered under the fragments of its architecture, where they had been concealed from the rapacious conquerors of Greece for a period of nearly two thousand years. They have been united, and the very few parts of them which were deficient restored at Rome, by Thorwaldsen, the celebrated Danish sculptor.

Mr. Cockerell, in his excellent paper on

* Statements however vary somewhat respecting its exact dimensions.

these sculptures, published in the 12th No. of the Journal of Science and Arts, says:—"But what may be considered of still greater interest, and that which renders the discovery of the first importance to architecture as well as to archaiology is, that they afford us a complete example of the great historical compositions of entire statuary, with which the Greeks enriched the pediments of their temples; a species of representation hitherto unknown to us, and which far exceeds, in scale and splendour of effect, any which the moderns have attempted: for the greatest efforts of art hitherto employed in the grand pictures (the *stila machinoso*) of the Italians, cannot vie with compositions of this nature, any more than the materials by which either were effected can be compared together."

The style of these sculptures is mannered, and possesses no variety of expression. "A smile is seen on all the mouths, like that of an opera dancer; the cheeks are hollowed; the lips are thick; the nose is short, but angular and prominent; the eyes are protruded," probably for effect; "the forehead is flat and retiring; and the chin is remarkably long, and rather pointed; the hair and drapery are arranged with the greatest precision.

"The style of the architecture is pure and beautiful, and its order a grand and chaste Doric. In it we find a very remarkable and very ancient example of the practice which prevailed among the Greeks of painting their sculptures; for the style and execution of the colours of the temple prove that they cannot be of any other date than the original construction."

"In order to relieve the statues, the tympanum of the pediment was of a clear light blue: large portions of the colour were still seen on the fragments," says Mr. Smirke, "as we raised them from the ground. The moulding, both over and under the cornice, was painted; the leaf was red and white, and the superior moulding of the cornice was painted in encaustic; the colours being on marble, and more exposed, had long disappeared, but the relief in which the part so covered was found indicated very perfectly its outline."

The Eginetans formed a school, and after them in succession, but perhaps before them in point of merit, are the Corinthians.

The inhabitants of Corinth were very early distinguished for their riches and their maritime force. Few situations are more favourable for commerce than that of Corinth; and Homer and Thucydides frequently gave Corinth the epithet of *opulent*.

The genius and inclination of the Corinthians led them rather to cultivate commerce and the peaceful arts than military enterprises. Satisfied with gaining wealth by honourable means, they next sought to enjoy it with taste, and gave themselves up to the luxuries and refinements which their opulence afforded them. They applied themselves also to render their city the most beautiful and magnificent of Greece, and spared nothing to accomplish it. Corinth was filled with temples, palaces, theatres, porticoes, and a vast number of other structures, as commendable for the rarity of the marbles employed in their construction as for the elegance of their architecture. These magnificent edifices were moreover enriched with an infinite number of columns and statues of the most precious materials, and executed by the hands of the most famous masters. Luxury, opulence, and effeminacy displayed themselves in every part of Corinth. She was, without exception, the richest and most voluptuous city that could be found in all Greece.

The invention of the Corinthian order has been spoken of in the article on ARCHITECTURE, but of the sacred architecture of the inhabitants of Corinth we have little left to guide us. There are ruins of a grand and solemn temple of the Doric order; its style is of an early period, as the shortness of the columns, with the great height and form of the architrave, clearly prove. The proportions of its columns and capitals are nearly similar to those at Pæstum, while the graceful form of its echinus, and its great projection, have a very striking appearance.

To the sacred architecture of the Greeks, as exhibited in their various temples, we are indebted for the purest and best canons of architecture that the world has ever seen.

The Egyptian temples were remarkable for the number and disposition of the columns contained in several enclosures within the walls. The little *cella* appeared like nothing but a kind of stable or lodging for the sacred animal to whom, as it may be, the building was consecrated. This was never entered but by the priests; and it is curious to observe how confined and unpretending this heart, or kernel of the structure, if we may so express it, is, when compared with the magnificent porticoes—magnificent in size, proportions, and often in style likewise. Obelisks and colossal statues were ordinarily placed before the entrance. These were sometimes preceded by alleys of sphinxes or of lions of immense size. Near the gates

two masses of a pyramidal form were erected: these were often covered with hieroglyphic *bassi-rilievi*. A corbel scooped out in the shape of a gorge was the only substitution for the entablature, whether to the gate itself or to the two lofty masses adjoining. No pediment or shape of roof interfered with the horizontal line of the platform above, where it is probable the priests often passed the night, according to the usage of the country. Here they had abundant opportunities for making, under a beautiful sky, those astronomical observations which occupied so considerable a portion of their thoughts. Thus every thing about an Egyptian temple was calculated to excite wonder and a sensation of awe. The gigantic obelisks, columns, and pyramids without—the endless ranges of lofty columns within—the hieroglyphics and robed priests—all combined to weave a kind of mysterious charm, which the ministers of *religion* knew well how to convert to their own advantage.

The varieties of temples among the Romans were numerous; whereof those built by the kings, &c., consecrated by the augurs, and wherein the exercises of religion were regularly performed, were held especially worthy of that appellation. Those which were not consecrated were called ÆDES (see that word). Those little temples which were covered or roofed they denominated ÆDICULÆ (which refer to); the open ones, *sacellæ*. Other edifices, consecrated to particular mysteries of their worship, received the names of *fana* or *delubra*. See DELUBRUM and FANE.

The Romans, in point of fact, appear to have outdone all other nations in respect to the number of their temples. They not only erected them to their gods, to their virtues, to their diseases, &c., but also to their emperors, and that even in their lifetime; instances whereof we meet with in medals, inscriptions, and other monuments.

The temple of Jerusalem was similar in its plan to the TABERNACLE (which refer to). The first temple was begun by Solomon about the year of the world 2992, and according to some chronologers, before Christ 1012, and was finished in eight years. Great mistakes have been committed respecting the dimensions of this building, by confounding the emblematical description of Ezekiel with the plain account thereof in the Books of Kings and Chronicles, to which we beg to direct the reader's attention.

The second temple of Jerusalem was built by the Jews after their return from the Babylonish captivity, under the inspection and influence of Zerubbabel their governor, and of Joshua the high priest, with the leave and encouragement of Cyrus the Persian emperor, to whom Judea was now become a tributary kingdom. This temple was plundered and profaned by Antiochus Epiphanes (who also caused the public worship in it to cease), and afterwards purified by Judas Maccabeus, who restored the divine worship; and, after having stood five hundred years, it was rebuilt by Herod, with a magnificence approaching to that of Solomon's. Tacitus calls it *immensæ opulentiæ templum;* and Josephus says it was the most astonishing structure he had ever seen, as well on account of its architecture as its magnitude, and likewise the richness and magnificence of its various parts, and the reputation of its sacred appurtenances. This temple, which Herod began to build about sixteen years before the birth of Christ, and so far completed, in nine years and a half, as to be fit for divine service, was at length destroyed by the Romans on the same month and day of the month on which Solomon's temple was demolished by the Babylonians.

The Indian temples, or pagodas, are sometimes of prodigious size. We have treated of them more at large under the head of PAGODA.

We may remark, in conclusion, that nothing is more commonly found on ancient medals, and particularly those of the Romans, than representations, some of them very exact, of different temples.

The following works treat more especially of the subject now under review, and require therefore to be pointed out to the reader, who is likewise referred to the general list of books attached to the article on ARCHITECTURE.

On the tabernacle of the Jews:—*Antiquities of* JOSEPHUS, 3d book, 17th and following chapters. Philippus AQUINAS, *Explications littérales, allégoriques, et morales du Tabernacle*, Paris, 1624, 4to. GREW, in the 4th book of his *Sacred Cosmology*. LUND, in his *Judaic Antiquities*. S. VAN-TILL, *Commentarius de Tabernaculo Mosis*, Amst. 1714, 4to. G. PERINGERUS, *Historia Tabernaculi Mosaici*, Upsal, 1668. A. SCHULTENS, *De Mysteriis Tabernaculi Mosaici*, Fran. 1729, 4to. Joann. Gottfr. TYMPIUS, *Tabernaculum e Monumentis Mosaicis descriptum*, Jen. 1731, 4to. H. BENZELIUS, *Templum Mosaicum*, in his *Syntagma Dissertationum*, 2d vol. 97th and following pages. WICHMANSHAUSEN, *De Velis Tabernaculi et Templi*, Witt. 1718. Sebald. RAUIUS, *Comm. de iis quæ ex Arabia in*

Usum Tabernaculi fuerunt petita, Ultraj. 1733, reprinted at Leipsic, 1755.

On the temple of Jerusalem we may likewise consult JOSEPHUS's *Antiquities*, book 8, chap. 3. *Portrait of the Temple of Solomon*, by J. J. LEO, Amst. 1643, 4to. J. LIGHTFOOT, *Descriptio Templi Hierosolymitani, præsertim quale erat tempore servatoris nostri*, reprinted in the 1st vol. of his works, Rotterdam, 1686, fol. Samuel LEE, *On the Temple and the Priesthood*, London, 1665, fol. M. HAFENREFFERUS, *De Templo Ezechielis*, Tubing. 1613, fol. G. CARRERI, at the 142d page of the 1st vol. of the French translation of his *Travels*, Paris, 1719, 12mo.

On the temples of the ancient Greeks and Romans we may consult:—J. C. BULENGERUS, in the last chapter of the 3d book of his work, *De Templis Ethnicorum*, (in the 7th vol. of GRONOVIUS). J. KOOL, *De Templis Antiquorum*, Lugd. Bat. 1695. P. VENUTI has given, in the 10th vol. and 211th page of the *Memoirs of the Academy of Cortona*, an Italian dissertation on ancient temples.

Upon the temples of Rome we find details in the topography of that town, by DONATIUS, NARDINI, &c. Jac. GUTHIERIUS, *De Jure Pontificio*, lib. 3. Justus RYCQUIUS, *De Capitolio*. J. CASTALIO, *De Templo Pacis*, Rome, 1614, 4to.; and in the 4th vol. of the Thesaurus of GRÆVIUS. RUDBECK, in his *Atlantica*, vol. i. p. 247. *Temples anciens et modernes; ou, Observations historiques et critiques sur les plus célèbres Monumens d'Architecture Grecque et Gothique*, by the Abbé MAY, Paris, 1774, 8vo. But above all we would quote a German work, by STIEGLITZ, called *Archaiology of the Greeks and Romans*, Weimar, 1801, 3 vols. 8vo., from which indeed this article is in a great measure extracted.

TENIA. [Lat. *tænia*, a fillet or headband, from the Greek, ταινια.] *In architecture.* The upper member of the Doric architrave. A kind of LISTEL (which word see).

TEREBRA. [Lat. from Gr. τερω, to bore through.] *In engraving.* In the last chapter of his *Natural History*, PLINY makes mention of this instrument as used by engravers of precious stones. It is a small pointed tool, which, put into action by the drill, serves to pierce a stone through its entire thickness without any hazard of breaking it.

TERMINUS. [Lat.] See HERMES.

TERRACE. [Fr. *terrasse.*] *In architecture and landscape gardening.* Any walk or bank of earth, raised to a proper elevation in a garden or court, for the purpose of a promenade, or of affording a prospect The term is likewise applied to such roofs of houses as, being quite flat, present a space whereon to walk. These kind of terraces were and are very common in the houses of warmer countries, where they are frequently resorted to by the inhabitants as a cool and pleasant situation when the sun has gone down, and the shades of evening descend.

TERRA COTTA. [Lat. baked earth.] *In architecture, sculpture, &c.* Earth or clay was the first matter employed by artists, whether in building or modelling; and at much more recent periods was abundantly used for the latter purpose, and was the substance of many beautifully executed *bassi rilievi*, of which relics and examples have been found among the ruins of Herculaneum and Pompeii, and at other places. In fact, it is greatly used at the present day for constructing architectural ornaments, &c.; it being plastic, readily worked, and at the same time solid and unexpensive.

TESSELATED PAVEMENT. [Lat. *tessella*, dim. of *tessera.*] *In archaiology.* A collection of small square stones, tiles, or boards, made into chequer-work for a floor. A pavement of rich musaic work, made of curious square marbles, bricks, or tiles, in shape and disposition resembling dice. Various ancient specimens of these have been from time to time exhumed in Italy, and other countries of Europe.

TESSERA. [Lat. a square tile, from Gr. τεσσαρες, four.] *In archaiology.* The *tesseræ* were small pieces of wood, bone, ivory, or bronze, which received different names according to the several uses to which they were destined. Thus, there were *tesseræ* of the theatre, of the gladiators, of liberality, &c. The first-mentioned were distributed in the solemn games, and bore either the names of the consuls, the head of the emperor, or a theatrical mask, with an inscription on the reverse. The vignette of the preface to the 4th vol. of the *Pitture d'Ercolano* offers one of this kind, which, however, is round in shape, and appears to represent on one side the exterior view of a theatre, and on the reverse the name of Æschylus and the number XVI. Upon the same vignette is engraven another *tessera*, whereon we see a half-circular edifice, in the middle of which a kind of tower is erected.

The gladiatorial *tesseræ* were shaped like a long square. They were so termed from being distributed among the gladiators, as a sort of certificate that they had exhibited on such a day before the public. A great number of these are found in the

Recueil des Inscriptions of FABRETTI. The shape is the same in each; and they bear ordinarily inscriptions stating the name of the gladiator, the day when he appeared in public, and the names of the consuls for the year.

In the times of the emperors *tesseræ* were distributed among the people, entitling them to the reception, at stated periods, of a quantity of corn, oil, or sometimes silver: hence these were denominated *tesseræ liberalitatis*. In the same class we may place the *tesseræ conviviales*, which bestowed the right of assisting at public festivals or banquets.

The *tesseræ hospitales* were either public or private. This was an interesting usage of antiquity. Among those of the former nature are instances of two municipal towns which put themselves under the patronage of the Roman governor; and the reciprocal engagement between them, engraved on two copper-plates, in the form of an oblong square, with a pediment at the top, is called in both *tesseræ hospitales*. The design of the private species was to cultivate a lasting friendship between individuals and their families; and afforded a mutual claim to the contracting parties and their descendants to reception and hospitable treatment at each other's houses, as occasion required. For this end the *tesseræ* were so contrived as best to preserve the memory of the transaction to posterity. One method of doing this was by dividing one of them lengthwise into two equal parts; upon each of which one of the parties wrote his name, and interchanged it with the other.

We may consult on this subject:—*L'Antiquité expliquée* of MONTFAUCON. *Recueil d'Antiquités* of CAYLUS. *Inscriptionum antiquarum Explicatio*, by R. FABRETTI, Rome, 1599, fol. *Pitture d'Ercolano*, 4th vol. (preface and notes). *De Tesseris Hospitalitatis*, by J. P. THOMASINO, Amstel, 1670, 12mo.

TETRADORON. [Gr.] *In ancient architecture.* That species of bricks employed by the Greeks in the construction of their private houses. They were four palms in length. See BRICKMAKING.

TETRASTYLE. [Gr. τετρασ̃τυλος.] *In architecture.* Term applied to a portico, temple, or other building, having four columns in front. See INTERCOLUMNIATION, ARCHITECTURE. &c.

THEATRE. [Gr. θέατρον, from θεάομαι, to behold.] *In architecture.* A building set apart for the purposes of dramatic representation.

After their temples, the theatres were, by the Greeks and Romans, considered as the most considerable of their public edifices; and in order to account for this, it must be borne in mind that their uses were not restricted to the mere exhibition of shows, but that they were applied to other and more important purposes; they served as places of assembly when the people gathered together on any interesting political occasion, and hence the walls of the theatre almost as frequently reechoed with the deliberations of the citizens in matters of great public interest as with the merriment of the masked comedian or the lamentations of his tragic coadjutor.

The Greeks were in the habit of giving Bacchus the credit of having invented this species of edifice, and the theatres were accordingly very often dedicated to him, as was the case with that most magnificent one at Athens, of which the reader will find, as he proceeds, a succinct description.

In point of fact, the origin of theatrical representations is, no doubt, to be sought in the solemn processions which had been established in honour of the rosy god, and his equally beautiful sister divinity, Ceres. In these fêtes it was customary to chant dithyrambics in praise of Bacchus, and to accompany them with dances. In the sequel they introduced personations of satyrs, sileni, and nymphs; and hence, most probably, sprung the first use of masks. (See MASK.) For the amusement of the spectators, the intervals of the dance or chorus were filled by a relation of the adventures of the gods. Thespis, whose name is to this day so universally familiar, introduced this practice into Attica, but there is great reason to think that it had obtained for some time previously in other countries of Greece. It is to Athens, however, that our eyes must be turned to discover the first steps made by the dramatic art towards perfection, which were taken when these adventures, hitherto rudely improvised, were regularly written down, divided into various modes of action, and the serious separated from the droll.

At this period they constructed, in order to preserve the performers and spectators from the heat of the sun, a sort of huge cabin made of branches of trees; but this was more easily done when the procession or exhibition occurred in the country. In the towns they erected a scaffold of wood, and Thespis is said to have given his recitations in a chariot or cart. But, in process of time, and according to the progression which we may observe in all the arts, the scaffolding became permanent instead of temporary, was surrounded by a wall,

and at length shot up into the magnificent *theatre*, in the construction and decoration of which the extent of Grecian taste and skill was exhausted. In after ages, the Romans followed their example, if not with equal taste, with still greater splendour and luxury.

DESCRIPTION OF THE FIRST GREAT THEATRE AT ATHENS.—Ancient authors have treated of the construction of theatres but obscurely and imperfectly. Vitruvius has given us no account either of their dimensions, or of the number of their principal and constituent parts; presuming, it may be supposed, that they had been well enough known, or could never have perished; for example, he does not determine the dimensions of the rows of benches. Among the more modern writers the learned Scaliger has omitted the most essential parts, and the citations of Bulingerus from Athenæus, Hesychius, Eustathius, Suidas, and others, throw but a weak and imperfect light on the real construction of ancient theatres.

An exact description of the theatre of Bacchus, at Athens, whose circumference is still visible, and whose ruins are a monument of its ancient magnificence, will give us a true idea of these structures. The famous architect Philos built this theatre in the time of Pericles, above two thousand years ago: it consisted without of three rows of porticoes or galleries, one above the other, and was of a circular form. The diameter was one hundred of Athenian feet, nearly the same in English measure, for which reason it was called by the Athenians Hecatompedon. A part of the area, which comprehended fourteen feet of the diameter, did not belong precisely to the theatre, being behind the scene.

The theatre itself was divided into two principal partitions, one for the spectators, the other for the representators.

The parts designed for the spectators were the *conistra*, which the Romans called *arena:* the rows of benches, the little stairs, and the gallery called *circys*. The parts appropriated to the actors were the *orchestra*, the *logeon*, or *thymele*, the *proscenium*, and the *scene*. In that part of the edifice allotted to the spectators were twenty four rows of seats or benches ascending gradually one above the other, and proceeding round the *conistra* or *arena*, in an arch of a circle, to the stage, which the Greeks called *proscenion*. These benches were distinguished eight and eight, by three coridors or passages, which were called *diagoma*. They were of the same figure with the rows of the seats, and were contrived for the passage of the spectators from one story to another, without incommoding those who were already placed. For the same convenience there were stairs that passed from one coridor to another across the several rows, and near those stairs there were doors by which the people entered from the galleries on the outside, and took their places according to their rank and distinction. The best places were in the middle division, containing eight rows of seats between the eighth and seventeenth: this division was called *bouleuticon*, and designed for the magistrates, the other rows were called *ephebicon*, and were for the citizens, after they were eighteen years of age.

The height of each of these rows of benches was about thirteen inches, their breadth about twenty-two inches; the lowest bench was about four feet high from the level of the floor: the height and breadth of the coridors and passages was double the height and breadth of the benches. The sides of the stairs passing from the body of the edifice towards the stage were not parallel, for the space between them grew sharper as they came near the *conistra* or *arena*, and ended in the figure of a wedge, whence the Romans called them *cunei*, to prevent the falling down of the rain upon those steps that were called pent-houses set up to carry off the water.

Above the upper coridor there was a gallery called *circys*, for women, where those who were infamous, or irregular in their lives, were not permitted to enter.

This theatre was not near so spacious as that built at Rome by Marcus Scaurus the ædile; for in that there was room for seventy-nine thousand persons, in this there was room for six thousand; it could not contain less, for the suffrages of the people were taken in it, and by the Athenian laws six thousand suffrages were requisite to make a decree of the people authentic.

Thus much for the places appointed for the spectators. As to those which were designed for the actors (which comprehended the orchestra, the logeon or thymele, the proscenium, and the scene), the orchestra was about four feet from the ground, its figure was an oblong square, thirty-six feet in length, extending from the stage to the rows of benches; its breadth is not mentioned in the memoirs we have of this theatre, which were taken upon the spot about one hundred years since, by Mons. de la Guillatiere, an inge-

nious traveller. In certain places of it the music, the chorus, and the mimics were disposed. Among the Romans it was put to a more honourable use, for the emperor and senate had places upon it. Upon the flat of the orchestra, towards the place of the actors, was an elevation or platform called logeon or thymele, which among the Romans was called *pulpitum;* it was higher than the orchestra; its figure was square, being six feet every side, and in this place the principal part of the chorus made their recitations, and in comic interludes the mimics used to perform in it.

The proscenion, or stage, was raised above the logeon. That great architect, Philos, contrived the edifice in such a manner as that the representations may be seen, and the voices of the actors may be heard with the greatest advantage. The proscenion was eighteen feet in breadth, and its length extended from one side of the edifice to the opposite side, but not diametrically, being eighteen feet distant from the centre.

The *scene*, properly speaking, was the columns and ornaments of architecture raised from the foundation, and upon the sides of the proscenion, for its beauty and decoration. Agatharcus was the first architect who found out the way to adorn scenes by the rules of perspective, and Æschylus assisted him.

Parascenion signified the entire space before and behind the scene, and the same name was given to all the avenues and passages from the music-room to the place where the actors performed.

The theatre of Regilla, not far from the temple of Theseus in Athens, was covered magnificently, having a fair roof of cedar. The ODEON (which see), or theatre of music, was covered likewise; but no part of the theatre of Bacchus, which we have described, was covered except the proscenion and circys. The Athenians, being exposed to the weather, came usually with great cloaks, to secure them from the rain or cold; and for defence against the sun, they had the sciadion, a kind of parasol, which the Romans used also in their theatres by the name of umbrella; but when a sudden storm arose, the play was interrupted, and the spectators dispersed.

A sort of tent-work over the entire area of the edifice might have been contrived as a shelter from the rain, and a shade from the sun. Such a roof would have obviated the inconveniences of roofed theatres, which obstruct the free communication of the air, and of unroofed theatres, which do not keep out the bad weather.

At Athens their plays were always represented in the daytime, which made the unroofed theatre much less inconvenient.

In that now described, Philos has preserved a just symmetry of architecture, and showed great judgment in assisting the communication of the sounds; for the voice being extenuated in an open and spacious place, where the distant walls, though of marble, could give little or no repercussion to make it audible; he contrived cells in the thickness of the coridors, in which he placed brass vessels supported by wedges of iron, that they might not touch the wall. The voice proceeding from the stage to the coridors, and striking upon the concavity of these vessels, was reverberated with more clearness and force: their number in all was twenty-eight, and they were called echea, because they gave an augmentation or an echo to the sound.

Outwardly there was a portico, consisting of a double gallery divided by rows of pillars, called the portico of Eumenicus. The floor of this portico was raised a good distance from the ground, so that from the street they ascended to it by stairs. It was of an oblong square figure, embellished with green palisadoes, to please the eyes of those who walked into it. Here it was that their repetitions were made, and proposed for the theatre, while the music and symphony was in the Odeon.

"If ever," says a sensible writer, "the present generation, or posterity, would dignify the drama with such noble edifices as were constructed for it by the ancient Greeks and Romans, they should enter into articles with the dramatic poets and performers, that no immodest witticisms be repeated, and no lascivious passions expressed on the stage. If the passion of love is to be described, let it be described with decency, as that of Dido for Æneas, in the Æneid.

"Not only the modesty of the spectators is to be scrupulously respected, but likewise every other virtue: when vice is the subject of the drama, it ought to be represented in an odious light; the unfortunate Mr. Budgel threw himself into the Thames, to do *what Cato had done, and Addison had approved**. See the bad effects of vice re-

* Addison's representation of Cato's suicide does not amount to a full approbation of the practice, even upon Cato's principles; but if it had, it could not encourage the same practice in a Christian: this stricture, therefore, of our ingenious author does not seem to be quite just.

presented as a virtue!—That the rules of virtue and decorum be regarded in all respects, the theatres should be removed from the neighbourhood of brothels, or the brothels should be compelled to remove out of the neighbourhood of the theatres; then these amusements would become as innocent as they are diverting. In the situation of a theatre, not only the manners of the people are to be considered, but also their health, by having it in a free and open air.

"In Athens the scene looked upon the castle-hill; Cynosarges, a suburb of Athens, was behind it; the Musæus was on the right hand; and the causeway leading to Pyræum, the neighbouring seaport, was on the other side."

The *Olympic Theatre of Vicenza* was designed and built in 1583 by Palladio, in imitation of the ancient theatres. Its form is semi-elliptical, it not being possible from the narrowness of the situation to use a semicircle. This semi-ellipsis is encompassed all round with a frame-work of stairs consisting of fourteen steps of wood for the spectators. Its greater diameter is ninety-seven feet and a half, and its lesser, as far as the stage, is about fifty-seven feet and a half. At the summit of this staircase, or receding galleries of stairs, is a coridor of the Corinthian order, which, from the narrowness of the ground, could not be detached from the outer wall all round. Palladio therefore filled up the nine centre and the three external intercolumniations, where the columns touched the external wall, with niches and statues. The stage is constructed with two tiers of columns, both of the Corinthian order, and surmounted with a light and well proportioned attic. On the stylobate of the second story are placed statues, and the intercolumniations are enriched with niches and statues. The panels of the attic are ornamented with *bassi* and *mezzi rilievi* of the labours of Hercules, and the centre panel over the largest of three openings in the proscenium, which is arched, with a representation of an ancient hippodrome. Over this arch is the following inscription:—

VIRTVTI AC GENIO
OLYMPICORVM ACADEMIA THEATRVM HOC
A FVNDAMENTIS EREXIT
ANNO M.D.LXXXIIII. PALLADIO ARCHIT.

In the front of the stage are three openings, through which are seen three majestic avenues diverging right and left, on each side of which are magnificent palaces and private dwellings, finishing with triumphal arches, all planned and erected in *alto rilievo*, foreshortening and diminishing perspectively, by Vincenzo Scamozzi. The exterior of this theatre is by no means suitable to its internal beauty, but it was built, not at the expense of the senate or government of Rome, but by some private Vicentine gentlemen of the Olympic Academy.—*Vide l'Origine dell' Academia Olympica di Vicenza, con una breve Descrizione del suo Teatro Opera di Ottavio Bertotti Scamozzi, Architetto*, published at *Vicenza*, 1690, by *Giovanni Rossi*.

The *Theatre of Parma* is commonly supposed to have been the work of Palladio, and finished by Bernini; but neither of them had the smallest share in it. Gio. Battista Magnani, an architect and engineer, and Leonello Spada, a painter, were employed by the Duke Ranuccio Farnese to construct and embellish that famous theatre. Its form is semicircular, to which are added two straight sides. Its length from the wall to the front of the stage is about a hundred and twenty-five feet; and its breadth, reckoning from the wall behind the boxes, about ninety-three feet. Around the pit, which is about forty-eight feet broad, is erected on a basement, with balusters between the piers, a gradation of fourteen rows of seats, with two entrances at the sides, and a large ducal balcony in the middle. Each entrance is furnished with a large winding staircase. Over these gradual seats are raised two stately boxes, one Doric, and the other Ionic; each with a gradation of four rows of seats. The upper decoration of the boxes is sustained by enchased pillars, between which are arches supported by other pillars, smaller and insulated, which causes a confusion of appearance in the architecture, and a great impediment to the view of the spectators who are in the boxes. A worse effect is produced by the two great lateral entrances which are between the seats and the stage, as the two orders with which they are ornamented, instead of uniting in the best manner, divide, and rudely clash both with the theatre and with the stage. In the middle of the upper arch of these entrances, on a very high pedestal, is an equestrian statue, which seems determined to rush headlong, to destroy all rules of propriety. Great projections and unmeaning arches hurt the stage and the orchestra. But the greatest inconvenience is in the front of the stage being excessively narrow, and distant from the seats, whilst with the greatest ease it might have been constructed wider, and much nearer the

spectators. From the aforesaid inconvenience, and the abovementioned medley figure of the theatre, results this very great evil, that the spectators who are at the sides can see but a very small part of the stage; in compensation for which they hear surprisingly well, as the structure, whether by design or accident, is such that, a person whispering in one part, another situated at the opposite side distinctly hears him. This great theatre has no external decoration; and by being such a length of time out of use, is in such a ruinous state as scarcely to be visited without danger.—Vide *Capi d'Opera del Teatro antico moderno Italiano e straniero,* &c. *Presso Giacomo Curti,* 1789, Venezia.

The *theatre of Milan* begins from its foundation with a curve of a diameter of seventy-two feet, which gradually widens into two straight sides; whence in the stage the breadth is seventy-seven feet, the front of the stage is sixty-nine feet, and the length of the pit one hundred and forty feet, which is almost double its breadth. Hence it appears excessively long. The form of this theatre is directly opposite to that of the greatest number of other modern theatres, which all run narrow towards the stage; whilst this is widest at that part. Such a contrivance is very favourable for seeing as much as is possible in so uncouth a form. This theatre is constructed with all common boxes; nor has it any thing remarkable except that each box has opposite to it a small wardrobe, and between the one and the other is a wide corridor.

The celebrated *theatre of Fano* was designed about the year 1670, by James Torelli, and erected at the expense of himself and five other Fanesian gentlemen. Its form is what the French call the toilette form, being in the shape of a dressing-glass, eighty-four feet long, and little more than half broad. It has a convenient double staircase, which leads to the fifth tier of boxes, the last of which forms a lobby with a private gallery at each extremity of the straight sides. There are two columns on each side of the stage, with a niche between each column, where are the statues of Pallas and Minerva, and in the centre is the inscription, THEATRUM FORTUNÆ.

The *theatre at Verona* was built by Francesco Galli Bibiena, under the direction of the Marquis Maffei, and is situated within the Philharmonic Academy. Its figure is a curve, which gradually enlarges in proportion as it approaches the stage, and the boxes (which are in five tiers) project out more and more as they are distant from the stage; which, although it may have a good effect in looking towards the stage, must have a bad one in viewing the theatre *from* the stage; the front of which is rather narrow and ill designed. The orchestra is divided from the auditory, that none of the audience may be disturbed with the excessive noise of the instruments: and the stage is reckoned by the Italians to be placed in a just situation, because they think the actors ought never to be seen sideways. Between the auditory and the stage are doors leading to the pit, according to the custom of the ancients, which is an excellent contrivance; for the door ought never to be opposite to the stage, because it not only occupies the best place in the auditory, but weakens the voice of the actor. Besides the exterior roof, this theatre has an internal one of boards, with holes in certain places; which, like the body of a musical instrument, renders the theatre very sonorous. There are commodious staircases at the four angles; the corridors, lobbies, and stairs are convenient, but the principal entrance is on one side. In the Philharmonic Academy they still preserve a model for a theatre in the ancient Greek and Roman manner, which they intended at first to have executed, as it was made expressly for that purpose; but in the act of execution their courage failed them; and, despite the exertions of Maffei, and many other celebrated literary and scientific men, with which Verona abounded, fashion prevailed, and the present theatre was executed by Bibiena. Thus Verona was deprived of an ornament, which would have increased its splendour, and exhibited with advantage those admirable antiquities which it preserved with so much laudable care.

Rome has at least a dozen theatres; which one would suppose were excellently designed after so many monuments of the golden age of Augustus, and especially after the theatre of Marcellus. However it ought to have been, the fact is otherwise. The worst theatres in Italy are those of Rome; all irregular, ill shaped, defective in construction, and dirty to excess; yet the modern Romans think they have the most elegant theatres in the world.

Its largest theatre is that of the *Aliberti,* designed and executed by Ferdinand Bibiena, of an irregular and incommodious curve, with six tiers of arched boxes. The length of the pit is about fifty-five feet, and its greatest breadth fifty-one feet and

a half. It has miserable entrances, wretched staircases, impassable corridors, and the very worst situation in the city.

The *theatre of Tordinona* was built in the 17th century by Carlo Fontana, and rebuilt in the last under Clement XII. It is of a figure more approaching a circle than any other. Its greatest diameter is fifty-two feet, and its smallest forty-eight feet. It has six tiers of boxes, the upper tier of which is compressed in the side. Of the internal accommodations and external ornaments there is no occasion to make the least mention, it so much resembles all the rest.

The most modern theatre of Rome is that of *Argentina*, built by the Marquis Girolamo Teodoli. It has six tiers of boxes. Its figure is neither circular nor elliptical, but of that irregular shape called the horse-shoe or lyre. Its greater diameter is fifty-one feet, and its lesser forty-six feet. The situation, stairs, passages, and entrances, are all wretched.

Neither of these three large Roman theatres has any theatrical front, and they are all built of wood. The rest are in a similar style of inelegance and incommodiousness, but smaller.

The *theatre royal of Naples*, constructed according to a design of the engineer Brigadier Giorgio Metrano in 1737, is also of the lyre or horse-shoe form, that is, a semicircle, the extremities of which elongate in almost straight lines, but draw nearer to each other in proportion as they advance towards the stage. The greatest diameter of the pit is about seventy-three feet, and the smallest sixty-seven feet. There are six tiers of boxes, with a superb royal box in the middle of the second tier. The building is all of stone; the stairs are magnificent; the avenues, vestibules, corridors, and lobbies, spacious. The entrance, separated into three divisions, has some decorations which are neither sufficiently majestic or appropriate.

The *theatre royal of Turin* was erected in 1740 by Count Benedetto Alfieri, a gentleman of the chamber, and principal architect to the king of Sardinia. It is of an oval figure. The pit as far as the stage is fifty-seven feet in length, and about fifty in breath. There are six tiers of boxes, divided by partitions, but perhaps too much arched. The royal box in the second tier includes five boxes, ornamented with balustrades, and covered with a superb canopy over the centre, and projects out in a convex form, under which is the principal entrance into the pit. The last tier, or as they call it, the *dovecote* (*picciona*) has a parapet all balustraded, in the front of which is a circular row of seats for servants out of livery; the left side is for the public; and the right is separated for the servants of the court, and those of the ambassadors. At the two extremities, contiguous to the stage, are two boxes for persons in the service of the theatre, and excepting these two partitions, the boxes of this last tier are not in the least separated from the grand corridor which winds around. Under the orchestra is a concavity with two tubes at the ends, which extend to the height of the stage, in order to improve the sound.

The cieling is arched, and above is a room for the scene painters; but the convexity of the cieling is covered with strong cemented bitumen, to prevent the water from penetrating through, which would damage the paintings underneath. At the extremities are boxes continued round within the cornice, well calked and covered with bitumen, and filled with the finest sand, in order to absorb any small quantity of water which by accident may fall in, a very necessary precaution to preserve the painting of the cieling unhurt. In most of the theatres on the continent the lamp or chandelier is usually suspended from the middle of the cieling over the pit, within a large aperture, to the great injury of the principal paintings, the voice of the actors, the view of the boxes, and, above all, whoever is underneath is thus exposed to the dust, dirt, and even to no small danger. To avoid these inconveniencies, they have contrived what is not much less awkward, the lights to descend from the middle of the cieling of the proscenicum, which is decorated with two corinthian columns raised on a plain pedestal. Between the columns are two boxes, one above the other, for the actors; over the columns are pediments, and over the stage a larger one, all three inelegant, inappropriate, and ill conceived. The entrances, stairs, apartments of various kinds, galleries, lobbies, and corridors, are of a royal magnificence. There is also sufficient space for the machines of decoration, and every convenience for introducing quadrupeds on the stage, as well as for fireworks. Wells, drains, magazines, and ovens, are not omitted in this well furnished theatre; they have even contrived stoves with tubes communicating to the pit, to warm it when necessary. This considerable theatre has no front belonging to it but what is common with the royal palace to which it is annexed.

The *theatre at Bologna*, finished in 1763,

was designed and built by Antonio Galli Bibiena, the son of Ferdinando. In the inside it has the unhappy shape of the section of a bell cut lengthways. Its length in the pit is sixty-two feet, and its breadth in the stage is about fifty. There are five tiers of boxes, each consisting of twenty-five, besides a circular place round the pit four steps high, fenced with a balustrade. The boxes of the first and second tier are central, the two above are in flat sides, and those of the fifth are drawn into half moons, and are without balusters. Over the door are four tiers, but very small. The imposts and pilasters which divide the boxes are overloaded with cartouches, scrolls, brackets, and other wretched bizarreries of the Roman school of architecture. The parapets have wretched ill proportioned balustrades and worse projections. The two frontispieces of the lateral entrances terminate in a line with the supporters of the first story, exactly cutting the columns and the parapet. The other frontispiece of the entrance in the middle is fastened under the principal box, and even with the impost, but with an internal decoration, which is an almost unexampled barbarism in the art. It is pretended by the Bolognese that many disputes, oppositions, and satires, occasioned by the choice of this design of Bibiena, have caused alterations very prejudicial to the theatre. The exterior principal front is ornamented with two orders well divided; the first of Doric columns insulated, over the capitals of which are arches in a barbarous style, perhaps to render the porticoes which are on the same floor lighter. The second order is of a mixed Ionic, with windows between, and with their pediments, which are also in the windows, within the aforesaid porticoes.

Monsieur Soufflot constructed at Lyons in 1756 a theatre of an oval figure, the pit of which up to the stage is fifty-four feet in length and forty feet broad, with seats in the circumference and front. There are three tiers of boxes, each continued without partitions, and equally furnished with seats. The second tier is more recluse and private than the first, and the third more so than the second. This edifice is well provided with convenient appurtenances, and has a straight front with three tiers of windows, a large balcony in the middle, and a balustrade on the top surmounted with statues.

Theatre of Montpelier.—Montpelier has a theatre in the shape of a bell internally, about forty-four feet long, and thirty feet broad. The pit is surrounded with a portico, on the pillars of which are raised several tiers of boxes with spacious corridors round them, and at the bottom furnished with various steps to ascend and enter the apartments, offices, and vestibules; and the various staircases that are around this theatre form a regular edifice of a good appearance on the outside, but nothing to denote its internal use.

The *theatre of the opera at Paris*, built in 1769 from the designs of Moreau, is a long oval, with four tiers of boxes, without partitions, and there are likewise some boxes between the columns of the stage. The pit is about thirty-nine feet broad and thirty-two feet long, and has a range of seats in front. The outside is simply decorated, and has a very convenient portico.

Theatre of Versailles.—In the palace of Versailles M. Gabriel the king's architect erected in 1770 a theatre after the ancient manner, that is of a semicircular figure, with seats all round, encompassed with a gallery. The court occupies the pit, in the middle of which the king sits.

Theatre of Petersburgh.—At Petersburgh, under the Empress Elizabeth, was erected within the imperial palace a superb theatre by Count Rastelli, a Venetian. The stage is about seventy-two feet long, and the rest of the theatre, which is elliptical, is in length one hundred and three feet. There are five tiers of boxes, each divided into eighteen. The first tier has a balustrade; the second boxes have arched fronts; the third, drapery *à la toilette;* the fourth is plain, with flat sides; and the fifth, open, without any divisions. The imperial gallery, which is in front, was ornamented by Monsieur de la Motte, a French architect, with four columns to support it, and a canopy which extends over all the third tier. The court goes into this gallery to enjoy a sight of the dances, but to hear the opera better they go to a box contiguous to the orchestra. The stage is decorated with two columns on each side, and with two flights of stairs to facilitate the communication of the stage with the orchestra and pit.

Our own national theatres are, we presume, so well known to the reader, either visually or by description, that it does not seem necessary to go into the subject here. We may, however, observe, in passing, that the interior of Drury Lane Theatre has, within these three or four years, been remodeled in a very beautiful manner by Mr. Beazley the architect, and now pre-

sents one of the most elegant as well as compact *coups d'œils* of any theatre in Europe.

The following works may be consulted on the subject of the establishment and the disposition of theatres.—Nic. SABATTINI, *Pratica di fabricar Scene e Machine ne Teatri*, Rom. 1638, 4to. with engravings. Fabr. Carino MOTTA, *Trattato sopra la Struttura de Teatri e Scene*, Guast. 1676, fol. Enea ARNALDI, *Idea d'un Teatro nelle principali sue Parti simile a Teatri antichi, ad Uso moderno accommodato*, Vic. 1762, 4to. with prints. *Projet d'une Salle de Spectacle pour un Théâtre de Comédie*, Paris, 1766, 8vo. *Vues sur la Construction intérieure d'un Théâtre d'Opéra, suivant les Principes des Italiens*, Paris, 1766 and 1767, 2 vols. *Exposition des Principes qu'on doit suivre dans l'Ordonnance des Théâtres modernes*, Paris, 1769, 12mo. *Mémoire sur la Construction d'un Théâtre pour la Comédie Française*, London, 1770, 8vo. DUMONT, *Suite des Projets détaillés des Salles de Spectacles particulières, avec les Principes de Construction, tant pour la Mécanique des Théâtres que pour les Décorations en plusieurs genres*, Paris, 1773, 50 sheets, fol. ROUBO, *Traité de la Construction des Théâtres et des Machines théâtrales*, Paris, 1776, fol. with 10 engravings. NOVERRE, *Observations sur la Construction d'une nouvelle Salle d'Opéra*, Paris, 1781, 8vo. PATTE, *Essai sur l'Architecture théâtrale, ou de l'Ordonnance la plus avantageuse à une Salle de Spectacle, relativement aux Principes de l'Optique ou de l'Acoustique, avec un Examen des principaux Théâtres de l'Europe, et une Analyse des Ecrits les plus importans sur cette Matière*, Paris, 1782, 8vo. Vinc. LAMBERTI, *La Regolata Construzione de Teatri*, Nap. 1787, fol. Franc. RICATI, *Della Contruzione de Teatri, secondo il Costume d'Italia, vole a dirse in piccoli Logi*, Bass. 1790, 4to. *A Treatise on Theatres, including some Experiments on Sound*, by G. SAUNDERS, London, 1790, 4to.

Details and representations of ancient and modern theatres may be found in *Trattato de Teatri antichi e moderni*, Ver. 1723, 4to. J. CAPI, *Opera del Teatro antico e moderno, Italiano e Straniero*, Ven. 1789.

On the theatres of the ancients, we may consult, among other works:—BOINDIN, *Discours sur la Forme et la Construction du Theatre des Anciens, où l'on examine la Situation, les Proportions, et les Usages de toutes ses Parties*, in the 2d volume of *Mémoires de l'Academie*. Ant. BOCCHI, *Osservazioni sopra un Teatro antico, Scoperto in Adria*, Venez. 1739, 4to. with plates, and in the 3d volume of *Mémoires de l'Académie de Cortona*. Girol. del POZZO, *Sopra i Teatri degli antichi*. At the commencement of the translation of Sophocles, by Thos. FRANKLIN, London, 1766, 8vo. is a *Dissertation on ancient Tragedy*, in which we find a chapter entitled, *On the Construction of the Greek Theatre*. We find engravings of the ancient theatres in several books of travels, such, for instance, as the *Voyage Pittoresque de Naples et de Sicile*, by M. HOUEL, Paris, 1782, fol.

On the theatres of the moderns, more particularly, are:—G. MONTENARI, *Dicorso del Teatro Olimpico di* A. PALLADIO *in Vincenza*, Pad. 1733, 1749, 1752, 8vo. *Description du Théâtre de la Ville de Vicenza en Italie*, by A. PALLADIO, drawn by PATTE, Paris, 1779, 4to. The same theatre is found in the *Fabriche e disegni, di* A. PALLADIO, Vic. 1776—1785, 5 vols. fol. *Plante e spaccato del Teatro di Bologna*, Bol. 1763, fol. Cas. MORELLI, *Planta e Spaccato del nuovo Teatro d'Imola in Roma*, Rome, 1780, fol. *Plan de la Salle de l'Opéra de Berlin*, built by the Baron de KNOBELSDORF, Berlin, 1753, oblong fol. *Description de la nouvelle Salle de Comédie à Breslau*, Berlin, 1783, 4to. *Parallèle des Plans des plus belles Salles des Spectacles publics d'Europe*, by M. DUMONT, Paris, 1760. *Description de la Salle de Spectacle de Bordeaux*, by LOUIS, Paris, 1782, fol. *A Description of the Theatre Royal Drury Lane*, by B. WYATT, London, 4to.

THEORY. [Θεωρία, from Θεωρέω, to contemplate, which from Θεωρὸς a spectator.] *In all the arts.* Knowledge of an art so far as results from speculation on its nature, on the end which it proposes to attain, on the means which it is necessary to employ, &c. without being occupied with its practice. In the article entitled RULES OF ART, some observations will be found on the utility of a sound theory and of the regulations which are deducible therefrom.

THERICLEANS. See VASE.

THERISTRON, or THERISTRION. [Gr. from Θέρος, summer.] *In archæology.* A kind of large veil used by the Grecian women to defend them from the burning heat of the sun. Pollux states that it was common to men as well as to females. It was so placed on the head as to form a sort of headdress or bonnet, when it was not unfolded. It is represented on several antique figures of Esculapius.

THERMÆ. See BATH.

THERMOLOUSIA. See the same.

THESEIUM. [Lat.] See ATHENS, ELGIN MARBLES, &c.

THEUSA. [Lat.] *In archaiology.* A kind of chariot or waggon whereon the statues and images of the gods were borne in the sacred games.

THOLUS. [Lat. from Gr. θολος.] *In archaiology.* This word has been variously defined as the middle or centre of an arched or vaulted roof—as the roof itself of a temple or church, or as the lantern or cupola of a large public hall.

Pausanias applies the term to several circular edifices with a cupola at top, but which were not considered temples. At Athens was a building of this description, in which were found sundry little silver images, and where the Prytanea offered sacrifices. At Epidaurus was another *tholus*, in the wood sacred to Æsculapius, and behind the temple of that deity. Pausanias speaks of this as a very remarkable structure. It was built of white marble. Polycletes was the architect, and the interior was adorned with paintings. In Sparta was an edifice of a similar kind, in which were found statues of Jupiter and Venus.

THRONE. [Gr. θρόνος, from θράω, to sit.] *In archaiology*, &c. This word in its original meaning signifies merely a seat; but it was subsequently limited to the elevated and ornamented chairs of princes, chiefs, and magistrates, and was applied even to the seats of the gods themselves. Having thus become the symbol of sovereign power, the idea suggested itself to the ancient artists of representing the throne of a deity filled with his attributes only, instead of the deity himself, and various examples of this kind have been handed down to us in *bassi rilievi*, &c. It was the custom also among the ancients to consecrate by way of homage a throne to some particular divinity, and place it in his temple. These were generally as magnificent as it was in the power of the donor to make them. The immense throne executed by Bathycles in the town of Amyclæ, in Laconia, and of which Pausanias gives us a detailed account in the 18th and 19th chapters of the 3d book of his *Description of Greece*, was covered with a great number of sculptures. M. HEYNE has made a very interesting memoir respecting this throne, to be found at the commencement of the 1st vol. of his *Antiquarische Aufsatze*, and M. JANSEN has given a French translation thereof in his *Recueil de Pièces intéressantes concernant les Antiquités, les Beaux Arts, les Belles Lettres, et la Philosophie*, Paris, 6 vols. 8vo.

THUNDER. [Saxon.] *In archaiology.* Jupiter is far more frequently than any other deity, but still not exclusively, represented as armed with thunder, which is figured in two several ways,—sometimes as a kind of firebrand flaming at both ends, at others as a similar instrument with pointed arrowy extremities. It is obvious, however, that in giving a tangible form to this powerful engine of the wrath of the gods, much must be left to the imagination of the artist: we greatly question, indeed, whether any attempt to that effect is likely to be very successful.

THYRSUS. [Gr. θυρσος.] *In archaiology.* One of the most ancient and common attributes of Bacchus and his joyous crew. It consisted of a lance, the iron part of which was hidden in a cone of pine, in memory of the stratagem which the followers of Bacchus employed against the Indians, when they went to combat them with pikes, the iron of which was concealed by ivy leaves. It was used at all the festivals held in honour of the god of wine, and often enveloped with wreaths of ivy or bay, or with little fillets of other kinds. See BACCHUS, ATTRIBUTES.

TIARA. [A Persic word.] *In archaiology.* An ornament for the head, worn in ancient times by kings and priests on solemn occasions. This species of headdress was most ample at its upper part.

TIBERINUS. [Lat. the Tiber.] *In archaiology.* The habitations of the river deities and their attendants were supposed to be under water, and generally near the head of each river. If there was any grotto, the figure of the presiding deity was placed in it, with his urn, and the water gushing therefrom. Their temples were also built near the sources. The poets speak of these grottoes of the river gods, and describe some of them.

Tiberinus, or the residing deity of the Tiber, is the most celebrated of all these fabulous personages. In a statue at the Belvedere he appears inclined, and leaning on his urn, as the figures of the river gods generally do*. He is crowned with fruits and flowers, and has a venerable look, as chief of all the rivers of the province through which he leads his waters into the sea. Just by him lies the wolf suckling the twin brothers Romulus and Remus. He was sometimes repre-

* The ancients acted, in this particular, with more propriety than has been commonly observed. They not only stocked each element with proper beings, but also adapted the appearance and posture of them to their respective elements. Thus, as water strives to keep its level, the river deities are more or less reclined.

sented with horns, a known emblem of power, and which might denote his presiding over several streams, as his title of *Pater* did his majesty. The poets even tell us the colour of his skin, his hair, and his robes. They describe him likewise on particular occasions (as when amazed at some unusual incident, or under an uncommon concern) in a very picturesque manner. Æneid, viii. v. 64 and v. 34.

TIGER. [Gr. τιγρις, a Median word signifying swiftness: in the Armenian language, the same word signifies an arrow.] *In archaiology.* This animal is frequently depicted on ancient monuments as drawing the car of Bacchus, which office, however, is still oftener performed by panthers. See PANTHER.

TIGRIS. [same derivation.] A river of Asia. Its tutelary deity is distinguished, in the Agostini collection, by the tiger, on which he rests his right arm. The Euphrates, in a rilievo on the Constantine pillar, is marked out by the palm branch in his hand. These rivers are said to spring from the same source. Ovid speaks of them as carried in triumph together. They appear together on a medal of Trajan, where the genius of Mesopotamia is kneeling at the emperor's feet.

TOGA. [Lat. perhaps from *tego*, to cover.] *In ancient costume.* A wide habit, ordinarily made of white wool, without either sleeves or folds, which enveloped the whole body even to the feet, and was worn above the tunic. This garment differed both in richness, colour, and size, according to the condition and circumstances of the wearer; but, in all its diversities, it was held peculiar to the Roman people, no other being allowed by them the privilege of wearing it, and thus during the Saturnalia it was never worn at all, master and slave being then uniformly mixed up together. Some writers give to the toga the form of a semicircle, but it doubtless varied its shape according to the prevailing mode, and was regulated as to the introduction of folds and other ornamental matters (as we before observed), by the rank of the wearer.

The artist who has a Roman figure to enrobe will do wisely to betake himself to the contemplation and study of such ancient statues as remain to us. They will find a model, also, in the 35th plate of the 4th vol. of the Museum of Pius Clementinus. Jerome Bossius wrote a small treatise, *De Toga Romana*, Amst. 1671, 12mo., also see the Thesaurus of Sallengrius, vol. 2. At the end of our article on COSTUME mention is made of other works on the subject, to which likewise we beg to refer the reader.

TOGATI. [same derivation.] *In archaiology.* Those who, in the colonies and municipalities, habited themselves after the Roman fashion, and wore the toga.

TOGULA. [same derivation.] *In ancient costume.* A narrow and short kind of toga, worn by the poorer orders of citizens. We see one on an Etruscan figure which is standing at the villa Medicis, and spreads forth the right arm.

TOMB. [Gr. τυμβος, from τυφω, to burn.] *In architecture and sculpture.* This term may be said to include both the grave or sepulchre wherein a deceased person is interred, and the monument erected to preserve his memory. In many countries of antiquity it was most customary to burn the bodies of the dead, and to collect the ashes with pious care into an urn, which was deposited in a tomb or sepulchre. Among the Greeks these tombs were generally constructed outside the walls of the cities, with the exception of such as were raised to the founders of the place or to heroes. Nevertheless, an edict of Lycurgus permitted the Lacedæmonians to inter within the town, and even round about the temples, as is the custom at this day. The Athenian people, who possessed a considerable tract of ground in the vicinity of the town, had each his own particular tomb; but the other communities of Attica, with whom ground was more precious, were frequently obliged to put three or four funereal urns into the same recess. Clumps of trees, of different sorts, surrounded these sepulchres, which, in other respects, were mostly marked by a stunted pillar, on which the epitaph was engraven. To these spots, however, consecrated by sorrow and affection, the bereaved parties often repaired, scattering oil and other essences over the tombs of their relatives or friends.

In Campania, several tombs of the ancient inhabitants have been discovered, and in these it is that they found the beautiful Grecian vases (improperly called Etruscan), of which Mr. Hamilton successively formed two collections, the first published by D'Ancarville, the 2d by Tischbein. In both the one and the other of these works is represented one of the Campanian tombs, such as it appeared at the moment of its discovery. They were formed by an enclosure of cut stones, and covered with a sort of roof of flagstones shelving on both sides. The dead body was stretched on the ground, the feet

turned towards the entrance of the sepulchre, and the head ranged against the wall, from which were suspended, by bronze nails, vases of terra cotta, whilst others of a similar kind were disposed around the body.

In the plains of Etruria we also find many sepulchral grottoes scooped in a shallow manner out of the living rock. They are sometimes excavated in shape of a cross, or with three aisles, somewhat similar to our churches; others present squares of different proportions: gates have been constructed to pass from one grotto to another; and sometimes there are two, one above the other. These cells or sepulchres receive the daylight only through an opening placed in the middle of the vault, and which communicates with the superficies of the mountain or rock. The interior of these grottoes is often ornamented with paintings.

The Romans designated by the word *sepulchrum*, in the first place, the ordinary tomb wherein either the entire body of the defunct was deposited, or the ashes, where the usage was to burn it. In the second place, the term was applied to more magnificent appurtenances to the dead, such as are likewise denominated *monuments*, *mausolea*, sepulchral arches, &c. These were destined to princes, to the great and the rich. After having constructed a tomb, they celebrated there the funeral rites with all their ordinary paraphernalia, yet without depositing the body —this receptacle was called a cenotaph. Persons of an elevated class had sometimes, in their palaces, sepulchral vaults, where were deposited, in different urns, the ashes of their forefathers. The pyramid of Cestius, at Rome, constructed of Parian marble, and which contained a chamber ornamented with beautiful paintings, was the tomb of an individual surnamed Cestius, one of the *Septemviri epulones*. Pope Alexander VII. rescued this pyramid from the ruins under which it had been buried, in order to reestablish it in all its splendour.

After the decline of the arts, this species of architecture was much neglected, the tombs becoming simply masses of large stones, upon which were engraved rude effigies of the deceased, and inscriptions stating his age and circumstances of his death, &c. Sometimes for marble or stone plates of copper were substituted, rarely enamelled, but generally engraven. The dead person is here represented as clad in the habit commonly worn by him when living; his hands are joined as in the act of prayer; and two angels are, in most instances, placed near the cushion upon which his head reposes, to indicate his admission into heaven.

The revival of art opened a vast field for the sculptor and architect with respect to the construction of tombs or sepulchres. They have been plentifully adorned with groups and statues either of the deceased person himself, or of the holy or allegorical personages. Upon the splendid tomb of Julius the Second, Michel Angiolo, the prince of modern sculptors, exercised his surpassing talent, and there perhaps is to be found its most illustrious example, namely, the figure of Moses.

We may consult with advantage, relatively to the subject of antique tombs, the work of Gutherius, *De Jure Manium*, Paris, 1615, Lips. 1671, 8vo.; as also the different collections of antique monuments. See Sarcophagus.

With respect to modern tombs, many works appropriated to the history of provinces and families contain representations of them. Besides these, are the following:—*Discours sur les anciennes Sépultures de nos Rois*, by Mabillon, in the *Mémoires de l'Académie des Belles Lettres*, vol. 2, p. 633; a *Dissertation* on the same subject, by Legrand D'Aussi, is to be found in the *Mémoires de l'Institut*. *Les Monumens de la Monarchie Française*, by Montfaucon. *Les Antiquités Nationales*, by A. L. Millin, 5 vols. folio, or 5 vols. 4to. *Les Histoires de Bourgogne, du Languedoc, du Dauphiné*. Martini Gerbert, *Topographia principum Austriæ*, 1772, fol. *I Regali Sepolcri del Duomo di Palermo riconosciuti ed illustrati*, Nap. 1784, fol. *Sepulchral Monuments*, 3 vols. fol. &c. &c.

Tone. [Gr. τόνος, from τείνω, to stretch or expand.] *In painting, &c.* A term used chiefly in colouring to express the prevailing hue. Thus we say, this picture is of a dull tone, of a lively tone, of a soft tone, of a clear tone, &c. and thus it may be also observed—it is requisite to *heighten the tone* of this work, or otherwise, to render the colours more vivid, and, in some instances, the masses more decided and the figures more striking. The word tone, in relation to *chiaro-scuro*, expresses the degree of brightness or intensity. *Tone* is not precisely synonymous with *tint;* the latter relating rather to the *mixture* of colours, and the former to their *effect*.

Tongue. [ȚUNG, Saxon.] *In architecture.* An ornament with a triangular point, such as has been supposed, though erroneously, to belong to the serpent. This ornament, in conjunction with the egg, is extremely elegant, and is used between the volutes of the Ionic capitals, and also in the enta-

blature of the same order. See EGG and TONGUE.

TOPIARIUM OPUS. [Lat. a work made of trees, &c.] *In archaiology.* Pliny uses this term to designate a sort of garden ornament, which consisted in giving all kinds of fanciful forms to arbours and thickets.

TORCH. [Fr. *torche*, from Lat. *torris*, a firebrand.] *In archaiology.* The torches or flambeaux consecrated by the ancients to religion, were of the same kind as those employed in obsequies and nuptial ceremonies. They were all comprised under the generic name of *funalia*, because they were made of cords. The collection of engraved stones of Stosch presents an *ædicula*, and a two wheeled car drawn by two figures with torches in their hands. Among the Greeks, several fêtes were celebrated with torches, such as the lesser *Panathænea*, the fêtes of Hecate, of Vulcan, of Prometheus, of Ceres, &c. Upon ancient monuments we sometimes see torches of almost double the height of a man. These are generally conical, and apparently formed of several pieces bound together at certain distances, like the staves of a cask.

TOREUMATA. [Gr. τορευμα, from τορεύω, to engrave.] *In sculpture and engraving.* This word designates that description of works (more particularly vases) chased, and ornamented boldly *in rilievo.*

TOREUTIC. [Gr. τορευτος, polished.] *In sculpture and engraving.* This branch of art comprises not only all such matters of sculpture or engraving as are executed with high polish and delicacy (as has been erroneously stated), but, in point of fact, all sculptured or engraved figures in rilievo on wood, ivory, stone, marble, &c. more especially on the harder substances. Phidias is said to have invented this department of art, which was perhaps brought to perfection by Polycletes. It was known to all the nations of antiquity.

MR. HEYNE has written a *Dissertation upon the Toreutic Art*, in his *Antiquarische Aufsatze*, 2d vol. from p. 127 148. A French translation has been published by JANSEN, at the end of his translation of WINCKELMANN'S *History of Art.* M. QUATREMERE DE QUINCY also read a Dissertation on the same subject before the National Institute of France.

TOREUTON. [same derivation.] *In archaiology.* The Greeks designated by the terms τορευτον and γλυπτον every work of art produced by the graver or any similar instrument. See TOREUMATA, TOREUTIC.

TORSO. [Fr. *torse*, from Lat. *torsio*, a writhing or torturing.] *In sculpture.* Name given by artists to those mutilated statues of which nothing remains but the trunk. Every one at all familiar with the arts knows the famous antique torso regarded as the invaluable fragment of a statue of Hercules.

The name of *torso* is also applied to those columns the shafts of which are twisted. Of this description are the beautiful examples at the grand altar of Val de Grace. Of these kind of columns there are several varieties: as, for instance, the fluted or channeled torso column, and the cabled or indented one, &c.

TORTOISE. [Fr. *tortu.*] *In archaiology.* The tortoise was much celebrated among the Greeks, and from its scales the first lyres were fabricated. These animals are represented upon the Palestrina Musaic; and are, without doubt, the creatures which, according to the report of M. Sonnini, bear for the crocodile that antipathy erroneously attributed to the ichneumon.

The tortoise is a type or symbol frequently met with upon the medals of Peloponnesus and of Ægium in Achaia.

The ancients also gave the name of tortoise (testudo) to a sort of covered gallery, or fence made of boards topped with raw hides, under which, as a penthouse, the besiegers of a town got up close to the walls.

TORUS. [Lat.] *In architecture.* A large semicircular moulding used in the bases of columns.

TOURNAMENT. [Fr. *tournoi*, from *tourner*, to turn round.] *In the arts referring to chivalry.* In the middle ages, all kinds of military courses were thus denominated, which were practised agreeably to certain rules, between different chevaliers, or knights, and their squires. It would be difficult to fix the epoch at which these encounters were originated. For a considerable period the gentler sex, instigated by a natural repugnance to scenes of bloodshed, absented themselves systematically from the joust or tournament: but at length the spirit of curiosity, which many writers have not scrupled to appropriate more especially to that fascinating part of the creation, aided probably by the solicitations of the knights, each of whom thought he could pierce his opponent's heart with better grace in the presence of his "ladye-love," prevailed over all scruples, and it was then that the custom was esteemed to be most glorified, when its display attracted a whole host of fair and tender-hearted spectators.

The place of combat was a vast enclosure surrounded either by cords covered with cloth, or with a double row of barriers, separated about four feet from each other. Here were placed the minstrels and musicians, the attendants of the knights, the heralds, kings and serjeants at arms, &c. The mass of the people were assembled together without the fence: while an elegant gallery or amphitheatre was erected for the ladies, princes, judges of the tournament, and old knights put by age in a state *hors de combat*. A flourish of trumpets announced the arrival of the combatants, superbly equipped, and followed by their squires mounted. Sometimes they wore favours bestowed on them by the fair ones who looked favourably on their devotion: these were generally in the shape of a mantle or scarf, sleeve or bracelet, or, in short, of any detached piece of costume which the giver frequently disengaged from her own dress or ornaments, and still more frequently worked with her own hands. With this the warrior adorned his helmet, his lance, his shield, or some other portion of his armour. Their arms generally consisted of a *bâton* or staff, a blunted lance, and a sword without edge. In other cases, however, when the combat was not so completely sportive, but assumed a more earnest character, these foils were laid aside, and the regular warlike weapons substituted. The lance was commonly of ash-tree wood. It was the fashion to employ great address in using this instrument, and thus arose the expressions so frequent in books of chivalry—*faire un coup de lance; rompre la lance, briser la lance, baisser la lance*, &c. (These latter terms signify ceding the victory.) The most general exercises of the tournament consisted of breaking the adversary's lance, casting the dart, &c. &c.

In the sequel, the lists were richly ornamented in various ways after the example of the CIRCUSES and HIPPODROMES (see those words) of antiquity. These exercises were so privileged, that it was not permitted for a slave or serf to present himself. The horse and arms of the vanquished, and sometimes the unfortunate combatant himself, were considered as the fair prize of the victor.

If we may reasonably object to these pompous and lordly amusements of a former era, that they were attended not only with expense and danger, but that they were calculated to become, and, in point of fact, *did* become, pregnant sources of ill blood and animosity between man and man, it must be admitted, on the other hand, that they were serviceable as a field for the acquirement of skill and address, and that they tended to cultivate a high sense not only of courage and intrepidity, but of good faith and honour. Indeed, it was considered indispensable, in order to qualify an individual for an entrance into the lists, that his character should be stainless, or at all events, that he should present himself there for the express purpose of clearing it from unmerited reproach. Viewed merely as a splendid spectacle presented to the public gaze by a military race, the tournament is qualified to fill a high place in the fancy both of the poet and the painter. The bold and vigorous nobility of Europe entered in full armour the lists of combat, to the sound of warlike instruments, armed with lances decorated with rich streamers, or with the embroidered workmanship of their mistresses. To this superb and imposing costume the imagination of the artist must add the beauty of the horses (often extreme); the gaiety of the equipages; the eclat of the arms; the scaffolding filled with ranks of the noble and the fair; the tents or pavilions spread over the adjacent country, and formed of silk or cloth of gold; the prize awarded to the most brave by the united suffrages of the princes, ladies, and heralds, and presented with an embrace by the queen of the tournament; the victor led away among the approving shouts of the populace and the sound of warlike instruments, and relieved from his heavy armour by the gentle hands of the dames of quality. Such materials cannot fail to constitute many a happy subject for the pencil of the artist. It was in France that the tournament was practised with the greatest splendour and acquired the highest fame.

There exist several curious works on this interesting subject. We will instance the following:—*Vues générales sur les Tournois et la Table Ronde*, by M. de FONCEMAGNE, in the *Mémoires de l'Académie des Inscriptions*, vol. 18, p. 311. *Le Vrai Théâtre d'Honneur et de la Chevalerie, contenant les Combats, les Triomphes, les Tournois, les Joustes, les Armes, les Carrousels, les Courses de Bagues*, &c. by M. Vulson de la COLOMBIERE, Paris, 1648, 2 vols. fol. *Traité des Tournois, Joustes, Corrousels, et autres Spectacles*, by C. F. MENESTRIER, Lyons, 1660, 4to., and Paris, 1694, 8vo. *De l'Usage de Tournois*, by DUCANGE, *Dissertation* 6th on the *History of St. Louis. Des Armes à outrances et des Joustes*, by the same, *Diss.* 7th, ibid. *Mémoires sur*

l'Ancienne Chevalerie, considérée comme Etablissement politique et militaire, by J. B. de la Curne de SAINTE-PALAYE, Paris, 1759, 2 vols. 12mo.: [These memoirs, exceedingly interesting, are likewise to be found in the 20th vol. of the *Histoire de l'Académie des Inscriptions.*] The Royal Library of France possesses also some curious tracts on the subject.

TOWER. [ꝛoꝛ, Saxon.] *In architecture.* A very high building, of several stories, generally round, but sometimes square or polygonal, and which is commonly constructed to flank the walls of a fortress, or of the enclosure of a town or castle.

The tower of a church is ordinarily square, sometimes however circular, and more or less lofty, forming a receptacle for the clock and bells.

Mæcenas caused a magnificent tower to be constructed at Rome, the ruins of which are still visible. It is commonly received, that from this tower Nero indulged himself in the ferocious gratification of witnessing the conflagration of the imperial city. Other authorities, however, state this last point to have been the Quirinal Mount.

The tower of London was built in 1077 by William, the Norman bastard, who, profiting by the intestine divisions of the Saxon population, rendered himself master of England. This celebrated fortress is of considerable extent, commanding the river Thames, and serving as a prison for state culprits. It was formerly regarded as a royal palace, where the kings often held their court: but this custom has been for some centuries laid aside. It now contains a garrison; a magnificent arsenal, stored with arms and other warlike accoutrements; an office wherein are deposited the paraphernalia of royalty, &c. &c.

A sort of tower, or town gate, placed upon certain medals, with these words, *Providentia Augusti*, designates a magazine established for public purposes; but it is only since the reign of Constantine that this species of building is at all seen upon coins. Others think that it is, in the instances above cited, a type sacred to the city of Constantinople, the star of which appears above it. We find a tower commonly upon the heads of Cybele, of Isis, of Nemesis, and of several towns and provinces personified.

The *Tower of the Winds* is an octagonal building which Andronicus Cyrrhestes, one of those who recognised eight winds in nature, caused to be erected at Athens subsequently to the age of Pericles. The upper part of each of the eight faces or fronts is occupied by a symbolical figure representing the wind which blows from that side. The summit, which forms a pyramid of twenty-four sides, was terminated by a copper triton which turned according to the direction of the wind. Andronicus designed also that this tower should serve as an horologe for the Athenians, not only during the day, by means of the sundials with which its fronts were decorated, but also during the night, to which end a CLEPSYDRA was established there (see that word), and occupied the interior of the edifice. This building, still to be seen at Athens, is constructed of marble, which forms even the substance of its roof. STUART has given a representation of it in his *Antiquities of Athens*, and we find also a reduction of it in the *Galerie Antique* of Messrs. DELETTRE and BOUTROIS, pl. 48—55.

TOWN HALL. *In architecture.* An edifice applied to purposes very similar to those appropriated to the BASILICA of ancient times (see that word). It is generally by their style of architecture and important appearance that the wealth, extent, and power of the town over whose buildings they preside are estimated. The town hall is generally situated in the most central, open, and public part of the town or city. M. DURAND, in his *Recueil et Parallèle des Edifices anciens et modernes*, has engraved, at pl. 17, drawings and plans of several town halls. That of Brussels dates upwards of four hundred years back. Its style is a sort of Gothic Saxon, presenting great unity and simplicity in the plan. Richness is, at the same time, occasionally and judiciously displayed, and the pyramidal system preserved throughout every part of the building. It presents to the eye a style light and airy, yet possessing quite sufficient solidity, as indeed its age will justify. The spire, in the centre, is in a more robust taste, and bears the print of the modern Lombard.

TRABEA. [Lat.] *In ancient costume.* A white gown, worn like the toga over the tunic, larger than the *toga*, and somewhat resembling the *paludamentum* of the generals, from which, however, it differed, that garment being wholly purple. The trabea was commonly bordered with purple, and ornamented with *clavi* (i. e. studs), or trabes (i. e. stripes), of scarlet.

TRAJAN COLUMN. See COLUMN.

TRANSPARENT. [Lat. from *trans*, on the other side, and *pareo*, to appear.] *In painting.* Those colours which are either light

and aerial in their own nature, or become so by the delicate manner in which they are laid in by the painter. In this latter sense the term only expresses effect, toward producing which the use of varnish is the great means. It is by the use of varnish that Rubens made his colours transparent. The most beautiful specimens indeed are to be found in the pictures of the Flemish and Venetian schools.

A *transparency* is a picture painted on fine linen, on silver or tissue paper, or on taffeta. It is radiated by lights skilfully introduced behind, and produces a striking and piquant effect on occasions of public illuminations or other festivities.

TRAVERTINO. [Ital.] See PEPERINO.

TREASURY. [from *treasure.*] *In architecture.* A building constructed for the reception of money or other precious things. Pausanias describes a very remarkable edifice of this kind—that erected at Orchomenes by King Minyas. It was wholly of marble, and its form was that of a rotunda gradually terminating in a point. The back part of ancient temples often served as a treasury. See OPISTHODOMUS.

TRIANGLE. [*triangulum*, Lat.] *In geometry.* A figure of three angles.

TRIBUNE. [Lat. *tribunus*, from *tres*, three, the original number.] *In archaiology.* The commander of a Roman legion. Also a bench or elevated place from which speeches were delivered. See ROSTRUM.

TRICLINIUM. [Lat.] *In archaiology.* A dining room furnished with couches which occupied three sides of the dinner table, the fourth being left free for the ingress and egress of the servants. From this disposition has arisen its name, which comes originally from the Greek τρεῖς, three, and κλίνη, a couch. See DINING ROOM.

TRIDENT. [Lat. *tridens.*] *In archaiology.* Sceptre with three points, forming a symbol or attribute of Neptune. It is observed on a great multitude of medals.

TRIGLYPH. [Gr. from τρεῖς, three, and γλυφω, to make hollow.] *In architecture.* An ornament repeated at equal intervals in the Doric frieze.

TRIPOD. [τρεῖς, three, and πους, a foot.] *In archaiology.* Any sort of vessel, table, seat, or instrument having three feet. The ancients made very common use of the tripod, for domestic purposes, to set their lamps or vases upon, and also in religious ceremonies. Perhaps the most frequent application of all others was to serve water on in their common habitations. In these instances, the upper part was so disposed as to receive a vase.

But to the poet and the artist, the most interesting recollections and associations connected with tripods arise from the circumstances peculiar to the establishment of the celebrated oracle of Delphos. With this famous event every individual who devotes himself to the pursuit of a classical and imaginative art should be well acquainted, and we shall therefore proceed to give a succinct account of the traditions respecting it.

The first discovery of this famous oracle is said to have been occasioned by some goats which were feeding on Mount Parnassus, near a deep and large cavern, with a narrow mouth. These goats were observed by a goatherd, called by Plutarch *Coretas*, to frisk and leap strangely, and to utter unusual sounds on approaching this cavern; upon which he had the curiosity to examine it, and found himself seized with the like fit of madness, skipping, dancing, and foretelling things to come. At the news of this discovery, multitudes flocked thither; and the surprising place was soon covered with a kind of chapel, originally made of laurel boughs, but, finally, converted into a temple of great magnitude and splendour. Such indeed was its reputation, and such the multitudes who came from all parts to consult the oracle, that the riches brought into the temple and city became comparable to those of the Persian kings. At first, the whole mystery requisite for obtaining the prophetic gift was to approach the cavern, and inhale the vapour issuing therefrom; but at length several enthusiasts, in the excess of their frenzy, having cast themselves headlong into the chasm, it was thought expedient, by way of prevention, to place over the hole, whence the vapour issued, a machine, which they called a "tripod," because it had three feet. Upon this chair a woman was seated, imbibing the vapour without danger, the three feet of the machine standing firmly on the rock. This priestess was named "Pythia," the Greek etymology of which word is "to inquire." The oracle could only be consulted on certain days, and, excepting on these, the priestess was forbidden, under pain of death, to go into the sanctuary to consult Apollo. Alexander, before his expedition into Asia, came to Delphi on one of the forbidden days, and entreated "Pythia" to mount the tripod, which she steadily refused. The impetuous prince, not brooking opposition, drew her by force from her cell; and on their way to the temple, she took occasion to exclaim, "My son, thou art invincible!" As soon as these

words were pronounced, Alexander cried out that he was satisfied, and would have no other oracle. Strange and ghastly contortions were said to have agitated the priestesses on ascending the tripod. They attempted to escape from the priests, who detained them by force. At length, yielding to the impulse of the god, they gave forth some unconnected words, which were put into wretched verse by the poets who attended, giving occasion to the raillery that Apollo, the prince of the Muses, was the worst of poets. This oracle was, like all others, obscure and ambiguous; and its retailers not inaccessible to the temptations of corruption.—Perhaps Dr. Thornton, in his lectures on gas, could give the best solution of the Pythian mystery. Its priestesses were remarkable for the pallid horror of their visages; and the resistance made by them no doubt resulted from the anguish of convulsed and shattered nerves.

Montfaucon, in his *Antiquité Expliquée*, vol. ii. part 1, pl. 52 and 53, has published several ancient tripods, among which we find (No. 3, pl. 53) one which was discovered in 1629, near Frejus, and which furnished to Peiresc the subject of his *Dissertation sur un Trépied ancien*, printed in the *Continuation des Mémoires de Littérature et d'Histoire*, vol. x. part 2, p. 247—277. The greater part of these tripods have a solid base; but two of them which Montfaucon has had engraved are disposed in such a manner as to be able to receive, at their upper part, a vase greater or less in diameter.

Besides the dissertation of Peiresc, cited above, and that which Montfaucon has taken occasion to say on the plates alluded to, the student may consult on this matter:—the *Miscellanea* of Spon, p. 118 and following. *An Explication of the Apotheosis of Homer*, by J. C. Schott, 67th and following pages. Spanheim, in his *Commentary on Callimachus*, 383d and subsequent pages. Beger, in the *Thesaurus Brandenburgicus*, 3d vol. 381st p. The *Thesaurus Ant. Rom.* of Grævius, 5th vol. 317th p. The *Museum Kercherianum*, by P. Onnanni, class 1, 4th and following pages. See Choragic, Cortina, Delphos, Cushion, &c.

Triumph. [Lat. *triumphes*, from Gr. τρίαμβος.] *In archaiology.* Several medals present triumphal marches. Sometimes we find thereon a chariot, as, for example, on those of Vespasian, who is represented holding a laurel branch, and crowned by Victory. In his *Osservazioni sopra Medaglioni*, IX. No. 1, Buonarroti has published a medallion on which Caracalla is, in like manner, placed upon a chariot, having in his hand an ivory sceptre.

Triumphal Arch. *In architecture.* A monument consisting of a grand portico or archway, erected at the entrance of a town, in its principal street, upon a bridge, or in a public road, to the glory of some celebrated general, or in memory of some important event. Some of these arches are merely honorary monuments set up in the spirit of adulation: these, of course, bear no triumphal trophies, while those of the former description are generally charged with inscriptions in honour of the triumpher, with bassi rilievi representing the arms of the vanquished enemy, &c. Several triumphal arches appear to have been erected with the double purpose of serving as monuments to the glory of the chieftain whose name they bear, and as gates of the town to which they belong.

The invention of these structures is attributable to the Romans. The earliest specimens are destitute of any magnificence. For a long time, they consisted merely of a plain arch, at top of which were placed the trophies and the statue of the triumpher. Subsequently the span was enlarged, the style enriched, and a profusion of all kinds of ornaments loaded on them. The whole mass formed a square penetrated by three arcades, crowned by a very high attic, which received inscriptions, and sometimes *bassi rilievi*, and which supported equestrian statues, triumphal cars, and other analogous ornaments, as we find represented on a variety of medals. The archivaults were adorned with figures of victory holding palms and crowns. In early times, when the triumpher passed under the arch which had been erected for the occasion, they had at the summit little figures of Victory with wings, and so suspended that, by means of pullies, they descended and placed a crown on the head of the victor. Hence the winged Victories which are represented on all these arches.

The Triumphal Arches varied greatly in point of construction, form, and decoration. As has been already observed, the first specimens were simple, composed only of a single arcade, adorned with Doric or Tuscan columns, without pedestal; and many of them were without imposts. Those existing at the present day offer three very distinct species:—First, those which consist but of a single arch, such as that of Titus at Rome, of Trajan at Ancona, &c. Secondly, those which are formed of two arches or arcades, such as

those of Verona, &c., which appear to have formed, at the same time, gates for the town. Thirdly, the species composed of three arcades, the centre being the principal or grand arch, and the others at each side much smaller. Such is the arch of Septimius Severus, of Constantine and others. The lesser arch of Septimius Severus, called also that of the *Orfevres*, forms a class apart. It is not vaulted, but formed in plat-band.

The arch known to us as that of Constantine is, thanks to the care and restorations made by order of Pope Clement XII. the best preserved of all the great antique arches, but as the greater part of the *bassi-rilievi* represent the victories of Trajan, it is most likely that this structure is the same as that erected by command of the senate in honour of that emperor; and this opinion is strengthened on recollecting that the decline of the arts in the time of Constantine had rendered it almost impossible that such a structure could have been then raised. This arch is at present buried to the height of the pedestals of the columns.

The arch of Septimius Severus, placed at the foot of the Capitoline Hill, and also partly buried, greatly resembles that of Constantine. The arch of Titus is the next most considerable in Rome, after these two. This monument, composed of one single arcade, is the first upon which we find the composite order employed. It was constructed after the death of the emperor, who was called *Divus*, and whose apotheosis is perceived in the centre of the vault.

The provincial towns were not backward to emulate the capital in erecting similar structures. A small arch placed upon the Flaminian way, and called *Arcus Portugalliæ*, was pulled down by order of Pope Alexander VII. and its sculpture placed in the Capitol. This arch was constructed out of the ruins of other edifices. The arch of Benevento (see that word), erected in honour of Trajan, is one of the most remarkable relics of antiquity, as well on account of its sculptures as its architecture; the order which decorates it is composite. The bassi rilievi with which it is adorned are similar in point of taste to those of the arch of Constantine at Rome. They represent different actions in the life of the Emperor Trajan; and indeed the work altogether may vie even with the structures of Rome both for grandeur of style and boldness of execution. This beautiful monument is too little known, for it does not stand in the ordinary route pursued by the artists and amateurs who flock into Italy.

The arch of Trajan, at Ancona, is likewise one of the most elegant works of ancient architecture. It is placed on the pier of the port, at the entrance of the mole, and is in capital preservation, having only been despoiled of its accessories and ornaments in bronze. It is decorated with four Corinthian columns on pedestals; and its principal charm arises from the beauty of its construction, the elegance of its proportions, and its great simplicity.

The arch of Rimini, erected in honour of Augustus, on the occasion of his repairing the Flaminian way, from this town to Rome, is the most ancient of all the antique arches, and, for its size, one of the noblest existing. That of Pola, in Istria, is regarded as a monument of the Augustan age, on account of the beauty of its architecture and ornaments.

On the subject of the triumphal arches of antiquity the following works may be consulted with advantage:—Bellori's work, and that of Suares *on the Arch of Septimius Severus*. The arch of *Benevento*, published at Rome in 1739 and 1770. That of *Titus*, published at Paris in 1770, &c.

Many beautiful structures of this kind have been erected in modern times, but principally on the plan, and in imitation, of one or other of the edifices abovementioned. Ancient medals are very numerous bearing figures of this specimen of architecture; and some of them represent arches which have for centuries past ceased to exist.

Triumphal Column. See Column.

Troglodytes. See Simia.

Trophy. [Gr. τροπαιον, from τροπη, the flight of an enemy.] *In archaiology.* This consisted, in the heroic ages and among the Greeks, merely in the trunk of an oak dressed and adorned with the arms and other spoils of a vanquished enemy; that is to say, with a cuirass, a casque, and a buckler, as are ordinarily the trophies which Mars Gradivus bears on his shoulder, as well as those which we see on the medals of Trajan; sometimes, even, there was nothing else but the cuirass without a buckler. The *trophy* was dressed on the field of battle, immediately after the victory. This custom passed, like others, from the Greek into the Roman states, the inhabitants affecting to believe that it was instituted by Romulus. They began, in the long run, to have the trophies carried before the triumphal car in the ceremonies which followed at Rome; and at this

period, in order to render more durable the glory of the conquerors, these memorials were carved in stone, in marble, and other solid substances. The first of these of which Roman history makes mention is that C. Flaminius erected in the year of Rome 530. It was of gold, and placed in the Capitol. But the most celebrated which were to be found at Rome during the times of the republic are the two trophies of Marius: they were of marble, and elevated in the fifth region, called *Esquilina*, upon two brick arches, which rested on the reservoir of the *Aqua Maria*. Sylla overturned them, contrary to the ancient prescription, which forbade any one to destroy or even to displace the trophies. Cæsar, during his ædility, restored them. The quarter of the imperial city in which they were set up still preserves the recollection of them. It is now called *Il Cimbrico*, between the churches of St. Julian and St. Eusebius upon the Esquiline Mount. Nardini is of opinion that these trophies were subsequently transported to the Capitol; but Ligorius believes, to the contrary, and with more reason, that the trophies of the Capitol are those of Domitian. Augustus caused a trophy to be erected in honour of him upon the Alps; and in Pliny we may read the inscription thereon. There are still some remains of this monument to be seen at Turbia, near Monaco. Since that era, these kind of monuments were greatly multiplied, and throughout Italy and the colonies, the traveller perpetually met with military, commemorative, or honorary trophies. The Trajan and Antonine columns (see COLUMN) belong, in point of fact, to this class. Besides these public and lasting testimonials, the ancients were in the habit of ornamenting the vestibules or porticoes of their houses and other edifices, with the arms and spoils of the vanquished. Upon ancient monuments the trophies are accompanied with a variety of ornaments, such, for instance, as those of the Trajan column. SPANHEIM, in his excellent work on the Cæsars, has given the representation, engraved by Picard, of one of these superb trophies which still exists at Rome, and is attributed to Trajan on account of the spot from whence it was extracted. On this relic the trunk or shaft is covered with a casque, wrought and invested with a chlamys. It is likewise ornamented with quivers, shields supported by winged sphinxes, tritons, centaurs, &c.

A great number of representations of trophies are to be found upon ancient medals, as well Greek as of the Roman and lower empires. The naval trophy is also observed frequently on ancient coins, &c. Three cornelians, in the collection of Stosch, offer examples of this kind.

The moderns have followed the steps of the ancients in this as in other respects, and trophies, military or otherwise, now frequently employ the skill of the sculptor and architect. They consist principally of a tasteful collection of all the instruments and insignia peculiar to the profession to whose member or members they are dedicated.

TRUTH. [treowtha, Saxon.] *In all the arts.* Truth is the very essence of the fine arts, and in all the advantages attributable to it, they may, without much stretch of metaphor, be said to participate. It is through the medium of truth alone, that the art of painting is enabled to display to us, and make us acquainted with, the different elements and climates of our globe; the appearances of distant places; their habitations and people; the personal likenesses of men; the infinite varieties of character; the evanescent shades of passion. With some exceptions, the same remarks will apply to the art of sculpture. Without truth indeed art can express nothing. The architect, to become successful, and obtain the applause of the judicious, must be true to his model; or if he has none, to the peculiar nature and intention of the building he is about to erect. The engraver must be true to the sentiment and expression as well as the mere contours of his subject, or his production will turn out "stale, flat, and unprofitable."

In short, that artist has mistaken his calling, and must be esteemed, *as an artist*, utterly worthless, who is either negligent in acquiring this quality of faithfulness, incapable of attaining it, or disposed to sacrifice it to the vagaries of a wanton and unrestrained fancy. The principle of correctness and verisimilitude should *never* be suffered to run at random through the labyrinths of the imagination.

At the same time, it should be borne in recollection that there is a *moral* as well as *physical* truth, which resides in the perceptions of the soul—in the *mind's* eye; and which is no less true than the other. This it is which invests the scenery of a country, or the circumstances of a scene, with a light which to the eye of the gifted artist, as to that of the poet, sheds over it a radiance and animates it with a spirit that enlivens and graces and adorns the subject without interfering *in the least* with

its truth and reality of outline or contour. Thus, also, it is allowable, in representing an ancient hero, to overlook the traditions respecting his actual personal appearance, and depict him according to the prevailing qualities of his character: for the former traits were evanescent and have faded; whilst his name has descended to us surrounded with the associations appertaining to his moral existence. The painter, therefore, or sculptor, would be justly blamable who should represent the warlike Alexander as what he really was, bodily speaking, a short and insignificant-looking man. Our notions of him are essentially *disembodied:* inseparably woven with the traditions of his heroism and greatness: and it is therefore requisite that the artist should endeavour to personify these attributes in his figure. This would not be the idle unsubstantial dreamings of an exuberant imagination; but would be entitled to the praise even of a loftier perception of truth than can be conveyed to us by the mere bodily organs of sense.

With this it is curious to compare the precision and exactitude of the Dutch school of painting, the productions of which, generally speaking, while they claim the high merit of extraordinary fidelity, afford a striking commentary on the observations made above;—their representations becoming monotonous, and indeed often offensive, from the total absence of that species of *moral truth* which we have been endeavouring, in so few words, to explain to the student of the arts. See SCHOOLS OF ART.

TSCHILMINAR. [Persic, signifying *forty columns.*] See PERSEPOLIS.

TUF. [Fr.] *In architecture.* A species of sandy stone, generally of a calcareous nature, porous, light, soft without being fragile, ductile, and well appropriated to the construction of vaults. This stone receives mortar well. Its colour varies, as well as its consistence, according to the predominance of its several component parts.

Tuf is designated by the ancients under the name of *porus.* Plutarch speaks of a *Silenus* made of this kind of substance; and the celebrated temple of Apollo at Delphos was built of it, as were also the walls of the temple of Jupiter at Olympius, and that portion of the temple of Juno at Altis, which looked towards the north. The TRAVERTINO (see that word), of which is constructed the immense cupola of St. Peter's at Rome, is undoubtedly of the genus of tuf.

TUMULUS. [Lat.] *In archaiology.* In the most ancient times the funereal monuments of the Greeks consisted merely in a tumulus, or small mound of earth, elevated conically, and sometimes covered with stone. In the country wherein old Troy was said to be situated, and on the side of the Hellespont, several of these *tumuli* have been found, respecting which the reader may consult, among other works, that of M. LECHEVALIER, *Sur la Troade.* So early as the siege of Troy, we hear of tumuli raised as monuments and even then considered very ancient. Such was that of Æsyétès; such also were the tombs of Zethes and of Amphion at Thebes, of which Pausanias speaks in the 17th chapter of his 9th book. Occasionally these *tumuli,* or earthen mounds, were surrounded with stone. Such was the case with regard to the tomb of Œnomaus, near Elis; &c.

The Celtic tribes had a custom of burying their dead at the summit of these elevations. Many specimens, and some very remarkable, still exist both in the countries of France and England.

TUNIC. [Lat. *tunica*; according to Varro, from tueor, to defend.] *In ancient costume.* Almost all the ancient nations have made use of this habiliment, which varied however greatly in point of shape, according to the habits of different populations. The tunic common to both sexes was composed of two pieces which presented pretty much the figure of a long square. It was fastened by a cincture, and disposed in such a manner as to allow the limbs full liberty and facility of movement. It was ordinarily sewed from the inferior border as high as the hips. The primitive Greek kings bore neither cuirass, casque, or chlamys, but a tunic made longer than that of other Greeks, with a mantle more ample than the chlamys, and a great sceptre. It is thus that they were accoutred upon the stage. The females adorned their tunics, upon the shoulder, with clasps of a greater or less size. With this exception, however, and that of the round buttons placed along the sleeves, we rarely perceive any other ornament upon the Greek tunic. The Dorian tunic was attached on the shoulders with buttons, as we observe upon an engraved figure in the 1st vol. and 6th pl. of Millin's *Monumens Inédits,* and upon two others at pl. 18. In the border which terminates the tunics of these latter, they have sought to imitate the undulations of the sea. The Dorian tunic was the most ancient vestment in use in Greece, and was always made with-

out sleeves; differing, in that respect, from the Ionian tunic, which had them. The Lacedæmonians habituated themselves to the use of red tunics, in time of war, in order that the blood which flowed from their wounds might be less perceptible both to themselves and their enemies. In remote ages, the tunic was of wool, and subsequently of flax. It was worn immediately over the skin. Those of the wealthier citizens were generally white, nevertheless, other colours were occasionally substituted. The poorer classes, together with the common soldiers and slaves, had them of a reddish hue. The tunic, fastened by the cincture, descended to the knee in the civil habit of men, and even as low as the heels on women. Soldiers and travellers turned it up, so as not to let it incommode their motion by falling below the thigh.

At first, modest women wore their tunics at the same time so low down and so high up, that it was scarcely possible to perceive any thing more than their faces. In process of time, however, as luxury advanced, and coquetry began to gain ground, they were cut in a freer style, and left both the throat and ancles bare. At a still more recent period Ælianus relates that the sleeves were not sewn, but, from the shoulder to the wrist, fastened with gold or silver clasps, in such a manner as that one full side of the tunic rested upon the left shoulder, the other side falling negligently over the superior part of the right arm. The sleeves of this garment ordinarily descended no lower than the elbow; when they descended so low as the wrists, they were denominated *chiridotes*. The term of *orthostade* was appropriated to those tunics long and of ample folds which were at the same time quite straight. See Orthostade. This kind of tunic was chiefly worn by the comedians and singers who appeared upon the stage; and this is the reason why Apollo Citharædes (formerly No. 195 of the Musée Napoléon) is clothed with it.

It was at first esteemed a mark of effeminacy among the hardy Romans to wear the tunic with sleeves: but manners having changed with the republic, towards the decline of the empire the tables were completely turned, and the thing to be scoffed at was the tunic without those appendages. The principal ornament of the Roman tunic consisted of a purple band, more or less large, called *clavus*, which ran all the way from the top of it to the bottom, and from whence the tunic took a particular name. Winckelmann has remarked that the tunic, which seems to have done duty as *chemise*, is seen upon several figures in *dishabille* or sleeping, such as the Flora Farnese, the Amazonian statues of the Capitol, that of Ariadne sleeping, and the beautiful hermaphrodite of the Farnese palace. The youngest of the daughters of Niobe, in that celebrated group, who throws herself upon the bosom of her mother, is clothed simply with the tunic. The same observation applies to the Cassandra, surprised and violated by Ajax, painted upon an elegant Greek vase, belonging to the Duchess Amelia of Weimar. On the greater number of statues, however, as well of busts and *bassi rilievi*, we perceive no other signs of the tunic except at the neck and breast, the figures being represented either with a mantle or the *toga*. See Toga.

As has been observed in speaking of the toga, the tunic received, according to its different uses or varieties, different names. The *tunica palliolata* was one to which was adapted a light cloak or mantle. The *tunica palmata* was of purple, and had a band of cloth of gold. This was the habiliment of those who received the honours of a triumph, or who presided at the games of the circus. The *tunica picta* was, doubtless, laced with embroideries of flowers, &c. as is a figure engraved in Millin's *Monumens Inédits*, vol. i. pl. 16. It would appear that the *tunica recta* was so called on account of their not putting the cincture over it, but suffering it to flow open and unrestrained. This sort of tunic was bestowed on enfranchised slaves, together with the robe. The tunic with a single sleeve was reserved for slaves. Nevertheless, on sundry monuments, this form of it is given to gods and heroes, and always to those who required a free movement of the right arm, in order to draw the bow, such as Diana, the Nymphs and the Amazons, &c.; or to play on the lyre, such as the Muses, &c. &c. Seneca speaks of the *tunica molesta* as of a shirt daubed over with brimstone, with which they covered those criminals condemned to be burnt alive. There are also many other varieties of this garment observable upon monuments, the peculiar appropriations of which we cannot, at this distance of time, clearly understand.

Tunnel. [*Tonnelle*, Fr.] *In architecture.* A subterranean canal constructed of masonry for the purpose of conducting the waters of a stream under a road or hill.

Turkish Architecture. This style assimilates itself, in a great measure, to that of the Saracenic. In their public build-

ings they indulge, above all other things, in a great number of towers and minarets. They employ little art, on the other hand, in the construction of private houses, the lower parts of which are generally of cut stone, and the upper of bricks dried in the sun. The dwellings of the rich are surrounded by a court-yard; and in the interior is often a beautiful hall, paved with marble and adorned with fountains. This hall is ordinarily of the whole height of the building, and surmounted by a small dome. See ARCHITECTURE.

TURQUOISE. [Fr. as coming from Turkey.] *In gem sculpture.* The tooth of an animal penetrated with the blue calx of copper: it loses its colour when heated: is opaque and of a lamellar texture, and susceptible of a fine polish. Some species are of a deep blue, some of a whitish blue, but which become of a deeper tint when heated.

The turquoise is the only petrifaction which is submitted to the tool of the graver. Several ancient Egyptian engravings are upon this substance; and St. Laurentius believes that it is the callaïs of the ancients.

TURTLE. [Lat. *tuitur*, so named, probably, from the tones of its voice.] An emblem of constancy and affection often to be met with in works of art, and more particularly upon the tombs of the early Christians.

TUSCAN. See COLUMN, ETRUSCAN, ORDERS of ARCHITECTURE.

TYMPANUM. [Gr. τύμπανον, a drum, from τύπτω, to strike.] The flat surface or space within a pediment. Also a drum. See TAMBOUR, ÆTOS, PEDIMENT.

TYPE. [Gr. τύπος, a mark.] *In numismatics.* The impression on a coin or medal of any image or figure whatever. A considerable number of these relics have no inscription: but it is rare to find them destitute of a type. In remote times we remark, on the reverse of medals, nothing but a hole or cavity, for which at a subsequent period was substituted the type. The most ancient of the Greek medals present no head; on the contrary, we often find them impressed with entire figures, or with representations of inanimate objects. The same observation will hold with regard to the Macedonian coins of equal antiquity. At length they began to place a head on the obverse, or face, of the medal: that is to say, on autonomous medals, the head of a divinity or a hero; on royal medals, that of a king or queen; on imperial ones, that of an emperor, &c.

It is not unfrequent that we find upon ancient coins several heads together, sometimes turned from, sometimes towards each other. The representations of the emperors generally terminated at the breast. See BUST. Sometimes, it is true, although rarely, we find the entire figure of the emperor on his medals; as in the instance of Trajan on those of Tripolis in Caria. Upon autonomous medals, the reverse usually connects itself with the subject of the obverse: as, for example, if the latter presents the head of some hero or divinity, the former depicts his attributes; as, the thunder for Jupiter, the lyre and the tripod for Apollo, &c. The medals of Roman families were mostly formed after the same system.

Several ancient Grecian towns had understood and perpetual types, by which they were uniformly recognised without accompanying inscriptions. Thus, the head of Pallas, or Minerva, and the owl (esteemed an emblem of wisdom) were the types of Athens; the labyrinth, that of Cnosus, a Cretan city; the *silphium*, or buckler of particular form, that of Cyrene; the rose, that of Rhodes, &c.

The Roman medals offer, together with the head of the emperor, images or types illustrative either of the history of the empire generally, or that of the emperor's family individually: ordinarily, they made more use of allegorical subjects than the Greeks, who confined themselves a great deal to subjects connected with their mythology.

Besides the species of *type* of which we have been treating, others often appear appertaining to the *monetarii*, or coiners, (see MONETARII) and affixed by them either to enhance the beauty of the design, or to distinguish their several workmanships. Upon the reverse of the money of Attica is the figure of the owl, together with a vase: occasionally, likewise, is the caduceus, the stag, the figure of victory, &c. See MEDALS.

U.

Ultramarine. [Lat. *ultra* beyond, and *marinus*, marine.] *In painting.* A beautiful blue colour used by painters, and prepared, by the process of calcination, from Lapis lazuli (which refer to). The genuineness of this article may be proved by submitting it to the following test. Put a portion in an iron vessel, and if, when that has been rendered red-hot, the paint retains its proper hue, it is unexceptionable. This exquisite colour has the additional value of being extremely lasting; perhaps more so than any other blue ever produced. See Azure, Bice, Blue.

Umber, or Umbre. [Ital. *ombria.*] *In painting.* A kind of dry, dusky-coloured earth, which, diluted with water, serves to make a dark brown colour, usually called with us a hair colour.

This substance was originally obtained from Ombria, the ancient name of the Duchy of Spoleto, in Italy. It might, however, be found in considerable plenty in England and Ireland, if properly looked after, several large masses of it having been thrown up in digging on the Mendip Hills in Somersetshire, and in the county of Wexford in Ireland. It is also sometimes extracted from the veins of lead ore, in Derbyshire and Flintshire.

Umbilicus. [Lat. the navel; the middle of any thing.] *In archaiology.* The books of the ancients were rolled around a staff or baton, called *umbilicus*, which served as an axle to the column or cylinder formed by the roll. Sometimes this tube had only the precise length of the manuscript wrapped round it; in other instances, it exceeded this, and the extremities were made shapely, and even decorated with little pieces of silver, of ivory, occasionally of gold itself, or with precious stones; and to this particular ornamented extremity of the tube or baton some authors limit the application of the word *umbilicus.* By the Greeks it was denominated *ομφαλος.*

Uncial. [Lat. *uncia*, a twelfth.] *In archaiology.* Term applied to letters standing for words in inscriptions and epitaphs. Manuscripts written with uncial letters possess from that circumstance a proof of considerable age, since these characters have not been in use since the seventh century. See Abbreviation, Inscription.

Undulating. See Sinuous.

Ungrateful. [Lat. *ingratus*, from *in*, a negative in composition, and *gratia*, thanks.] *In all the arts.* Any subject unfitted by its nature to produce a definite and happy effect in a work of art. Such, for instance, are those of which it is difficult to obtain a full or sufficient view—in other words, that are either fugitive, too much in motion, or apt to change colour, form, or character.

Uniformity. [Lat. from *unus*, one, and *forma*, form.] *In all the arts.* Resemblance of shape, of aim, or of style, between the several parts of a whole.

Union. [Lat. from *unus*, one.] *In all the arts.* See Agreement, Harmony.

Unity. [Same derivation.] *In all the arts.* This quality is essential to all the arts connected with design. Unity of time and of action must ever be maintained in a Composition (which word see), to the end that the thing represented may not appear to exceed the duration of time, &c. intended to be understood. If there should be in a painting several different effects of *chiaroscuro* introduced, it is necessary that one should always predominate over the remainder. In fact unity of object is, or should be, the great mark for the artist to aim at; for a divided attention is always painfully on the stretch: and when two objects occupy us in the same performance, it is an obvious deduction that the artist doubts the power of either, exclusively, to fix the regard of his spectators.

When an architect is charged with the construction of an edifice, his first care should be to obtain a clear and definite knowledge of its nature and destination: this done, he is enabled to invent and arrange the different parts in such a manner as that their *tout ensemble* shall display a building exactly applicable to the purposes sought to be administered to. This precision of character and design cannot perhaps be at all times attained: in this case, it will depend mainly on the taste and experience of the artist to fill up the deficiency; but, at all events, whatever plan he may decide on adopting, that plan must be kept constantly in view, or the result, instead of being harmonious and beautiful, will turn out to be incongruous and unsightly.

University. [Lat. *universus*, the whole, in allusion perhaps to the comprehensive

nature of the studies practised therein.] *In architecture.* The name of a mass of buildings erected for the education of youth in the liberal arts and sciences, such as have studied therein being admitted to certain *degrees* in different faculties. Universities generally comprehend within their mass one or more COLLEGES (see COLLEGE); but it must not be held that this is uniformly the case. The Scottish university of St. Andrew's was in existence before either of its colleges was founded, and it would so continue though both its colleges were leveled with the dust.

Universities, in their present form, and with their present privileges, are institutions comparatively modern. They sprang from the convents of regular clergy, or from the chapters of cathedrals in the church of Rome, where young men were educated for holy orders, in that benighted period when the little learning left in England was wholly in the hands of the monks. These convents were probably seminaries of learning from their original institution: and we know with certainty that in Old Aberdeen there was a monastery in which youth were instructed in theology and other sciences at least two centuries before the University and King's College were founded. The same was no doubt the case with respect to Oxford and Cambridge, and probably with respect to every town in Europe which now possesses a university having any claim to be called old; for it was not till the more eminent of the laity began to perceive the importance of literature and science that universities distinct from convents were founded, with the privilege of admitting to degrees, which conferred some rank in civil society. These universities have been long regarded as lay corporations; but as a proof that they had the ecclesiastical origin which we have assigned to them, it will be sufficient to observe, that the pope arrogated to himself the right of vesting them with all their distinctions; and that, prior to the reformation, every university in Europe conferred its degrees in all the faculties by authority derived from a papal bull.

It appears to the writer of this article extremely probable that the church of Rome derived her idea of academical honours from the Jews, among whom literary distinctions very similar subsisted before the nativity of our Saviour. Amongst them, the young student, with respect to his learning, was called a *disciple;* from his minority, a *junior;* and the *chosen,* or *elected,* on account of his election into the number of disciples.

The most ancient universities in Europe are those of Oxford, Cambridge, Paris, Salamanca, and Bologna: and in the two first-mentioned, the earliest founded colleges are those of *University, Baliol,* and *Merton,* in the former; and that of *St. Peter* in the latter. Oxford and Cambridge, however, were universities, or, as they were then called *Studies,* some hundreds of years before colleges or schools were built in them: for the former flourished as a seminary of learning in the reign of Alfred the Great; and the other, if we are to believe its partisans, still earlier. The universities of Scotland are four: St. Andrew's, Glasgow, Aberdeen, and Edinburgh. In Ireland, there is but one university; namely, that of Dublin, founded by Queen Elizabeth, and very richly endowed.

UNIVERSALITY. [Same derivation.] *In painting.* This quality, though impossible, strictly speaking, to be attained by any individual, should in a modified sense be acquired by the artist who enters for fame in the hazardous lists of historical painting. According to the subject which he has to treat, it is requisite that he should know well how to represent both landscape and architecture. He will occasionally find himself obliged to introduce the figures of horses, dogs, tigers, lions, serpents, &c. Warlike arms, utensils devoted to sacred ceremonies whether ancient or modern, groups of cattle, human figures—in short, almost every object which is susceptible of exhibition on canvas may be regarded as likely to fall in his way, and to demand a faithful delineation. The ancient artists, it is true, mostly disclaimed this *universality;* with them the sole object frequently was, to paint with exactness and expression the human form: but modern art has exploded their exclusive system; and requires at the hand of the painter of history an acquaintance with the extensive range to which we have alluded.

URN. [Lat. *urna.*] *In modelling, sculpture,* &c. A species of vase of a roundish form, but largest in the middle, destined, among the ancients, to receive and enclose the ashes of the dead; which destination its name, in fact, sufficiently indicates,—the Latin word *urna,* or *urnula,* being most probably a derivative of the verb *urere,* to burn. It is curious to remark that the Romans often made use of Grecian vases, obtained by them in various ways, for this purpose, as is evident from those

found in the tombs in the vicinity of Naples, which contain both bones and ashes. See VASE.

Urns are commonly met with in almost all collections of antiquities, and Montfaucon, in particular, has drawn and engraved a great number of them. In Millin's *Monumens Inédits*, vol. i. plates 3 and 20, two are published, extracted from the interesting and comprehensive collection of M. Van-Hoorn.

The substances employed in the construction of these vessels are numerous. Amongst them are gold, bronze, glass, terra-cotta, marble, and porphyry. They were made of all manner of shapes and sizes: some had smooth surfaces, others were engraved in *basso rilievo*. Many have been discovered bearing inscriptions on labels (see INSCRIPTION); others with the name only of the party to whose remains they were devoted. Several have no other character than the two letters, D. M. *Diis Manibus* (To the Shadowy Deities). Others, again, present nothing more than the name of the artist by whom they were wrought, written either on the handle or at the bottom.

The Egyptians sometimes enclosed in urns their sacred birds, having first had them embalmed. These urns were generally covered with hieroglyphics (see MUMMY). The Romans were in the habit of applying the same term to certain vases destined to receive suffrages in elections. Little vessels have also occasionally been found in ancient tombs, denominated *lacrymal urns*. See LACRYMATORY; and refer likewise to OSSUARIUM and CINERARUM.

USAGE. [Fr. from Lat. *utor*, to use.] *In all the arts.* We have already, in our articles COSTUME and MANNERS, made some observations on the absolute necessity the artist is under of rendering himself familiar with the modes, customs, and usages of different periods and nations, both ancient and modern. As far as the former great era of time is concerned, the only guides for the student are the descriptions in the classics, and the specimens on the monuments of art which have reached our day.

USTRINA. [Lat. from *uro*, to burn.] *In archaiology.* The place where dead bodies were burned. At Rome, the *Campus Martius* was appropriated for this purpose, to the wealthy, and the *Esquilia* to the poorer classes. There were, besides this, private *ustrinæ* devoted to the families of the great.

UTENSILS. [Fr. *ustensile*, from Lat. *utor*, to use.] *In archaiology.* A people gifted with so beautiful and pure a taste as the Greeks, who had eyes constantly accustomed to the exhibition of fine forms, such, for instance, as their architectural structures, and sculptures, may fairly be regarded as equally tasteful and elegant in their household furniture, and still more particularly in the vessels appropriated by them to purposes connected with their mythology. The fact is, that these minor displays of elegance kept full pace with the progress of the other arts. In proportion as luxury and magnificence were multiplied amongst this fine people, the greater was the richness and beauty of their household implements and utensils. It would appear, indeed, that even from the period of the siege of Troy, or perhaps, to speak more soberly, from the age of Homer, wealthy and distinguished personages amongst the Greeks already possessed precious utensils and articles of furniture, which however were seldom used except on public and solemn occasions: but, as was before observed, as opulence and power increased, this reserve was thrown off, and the augmented means were shown in every variety of way.

In receiving the arts of refined life from the Greeks, the Romans received, at the same time, their spirit of magnificence and luxury, and outrivalled in these ornamental matters their masters themselves. Indeed to such an extent did the love of pomp and finery prevail, that it was often gratified to the exclusion and sacrifice of real taste and beauty.

All which ancient authors have reported on this subject combines in testifying the great number, the extreme variety, the costly materials of the different utensils then in vogue: and most of those relics of the kind which have been preserved for the contemplation of the moderns exhibit, in a striking degree, the beautiful harmony and proportion, together with the exquisite finish, to be found (and there only to be found), amongst the works of those accomplished artists.

In various parts of our Dictionary the reader will find particular mention of several of the most conspicuous of these ornamental articles. For example, he is referred to CANDELABRUM, TRICLINIUM, LAMP, VASE, URN, TRIPOD, &c.

V.

VALLUM HADRIANI. [Lat. Hadrian's bulwark.] *In architecture.* A wall defended with towers built by the Emperor Hadrian, during the Roman possession of Britain, to preserve the inhabitants of the country from the incursions of the northern barbarians. It stretched along the whole breadth of the island, that is, from the river Tyne to the Solway frith. This formidable barrier was fifteen feet high, and in some places nine broad; was about a hundred miles long, and flanked by towers at regular distances; and along its sheltering range were constructed numerous towns and villas. The Britons denominated it the *Pictish wall.*

The VALLUM AGRICOLÆ was erected towards the north of Britain by Julius Agricola, father-in-law of Tacitus, the historian, and governor of Great Britain under the Emperor Vespasian. A similar barrier had also been constructed, denominated *vallum Antonini Pii,* to arrest the invasions of the Scots. Its position is not now distinctly known. Besides those, was the *vallum Severi,* a wall which stretched from one sea to another, between the gulfs of Glotta and Bodotria, at this day denominated the Clyde and the Forth. To conclude, *vallum* or *muris Stilicinis,* was thrown up by that general from the river-mouth of the Derwent to that of the Elme, against the Scots descending in that quarter.

VAPOURS. [Lat. *vapor.*] *In painting.* Watery emanations uprising either from the earth or from the surface of aqueous bodies. These vapours, which are denominated terrestrial, exhale continually, sometimes of a greater, sometimes of a lesser consistency. They rise only to a certain height, and that without quitting the earth, on which they rest as on a base. These occasion in colours an alteration so much the more strong inasmuch as their intermediate quantity is more or less augmented by the distance of the coloured object. They receive light, also, in various degrees and by various means; and as they are diaphanous, they transmit to all surrounding objects the luminous rays with which they themselves are invested; thus altering the purity of local colours, and establishing throughout a sort of aerial harmony. Before the rising of the sun, vapours are only lighted by the celestial vault, in the bluish tint of which they will be seen to participate. But on the upspringing of that glorious luminary, their hue alters, and becomes more warm and glowing. As the sun advances in height and strength, the vapours, more and more penetrated by his effulgence, expand and consequently lose their density, thus becoming less and less sensible: whilst, on his decline, they again thicken, and often inflame or redden in the lustre of evening. Twilight is in fact constituted of vapour.

The painter cannot dispense with studying the phenomena of vapours, their different degrees of density, their local colours, &c. He should observe that these exhalations are more abundant in humid or marshy situations, than on the summits where, when they have been drawn thither, they resolve themselves into clouds. Aerial vapours are least sensible when not invested with light. The moon exhibits them feebly: the dawn and the twilight a little stronger: but the sun himself is their great developer. The interposition of vapour between the eye and any coloured object more or less modifies that colour; and it will be obvious to every reader that daylight, moonlight, and firelight all occasionally wear strange unnatural appearances, which are to be attributed to the influence of these exhalations.

For further observations on this interesting subject, the student is referred to the excellent work of M. Valenciennes *Sur la Perspective,* from which the present article has been extracted.

VARNISH. [Fr. *vernis,* from Lat. *vernix,* from *ver,* the Spring—when the gum appears on the trees.] *In painting,* &c. A clear limpid fluid, capable of hardening without losing its transparency, used by painters, gilders, &c. to give a lustre to their works, to preserve them and defend them from the air.

A coat of varnish ought to possess the following properties:—1. It must exclude the action of the air; because wood and metals are varnished to defend them from decay and rust. 2. It must resist water; for otherwise the effect of the varnish could not be permanent. 3. It ought not to alter such colours as are intended to be preserved by this means. It is necessary therefore that a varnish should be easily

extended or spread over the surface, without leaving pores or cavities; that it should not crack or scale; and that it should resist water. Now resins are the only bodies that possess these properties. Resins consequently must be used as the bases of varnish. The question which of course presents itself must then be, how to dispose them for this use? and for this purpose they must be dissolved, as minutely divided as possible, and combined in such a manner that the imperfections of those which might be disposed to scale may be corrected by others.

Resins may be dissolved by three agents. 1. By fixed oil. 2. By volatile oil. 3. By alcohol. And accordingly we have three kinds of varnish: the fat or oily varnish, essential varnish, and spirit varnish. Before a resin is dissolved in a fixed oil, it is necessary to render the oil drying. For this purpose the oil is boiled with metallic oxides; in which operation the mucilage of the oil combines with the metal, while the oil itself unites with the oxigene of the oxide. To accelerate the drying of this varnish, it is necessary to add oil of turpentine. The essential varnishes consist of a solution of resin in oil of turpentine. The varnish being applied, the essential oil flies off, and leaves the resin. This is used only for paintings. When resins are dissolved in alcohol, the varnish dries very speedily, and is subject to crack; but this fault is corrected by adding a small quantity of turpentine to the mixture, which renders it brighter, and less brittle when dry.

Gold coloured Varnish.—Pound separately four ounces of stick lac, four ounces of gamboge, four ounces of dragon's blood, four ounces of anotta, and one ounce of saffron: put each of them separately into a quart of alcohol, and expose them for five days in a narrow-mouthed bottle to the sun, or keep them during that time in a very warm room, shaking them every now and then to hasten the solution. When they are all melted, mix them together. More or less of each of these ingredients will give the different tints of gold according as they are combined. In order to make silver imitate gold exactly when covered with this varnish, the quantity of ingredients must be somewhat greater. The method of gilding silver-leaf, &c. with this varnish is as follows: The silver-leaf being fixed on the subject, in the same manner as gold leaf, by the interposition of proper glutinous matters, the varnish is spread upon the piece with a brush or pencil. The first coat being dry the piece is again and again washed over with the varnish till the colour appears sufficiently deep. What is called *gilt leather*, and many picture frames, have no other than this counterfeit gilding. Washing them with a little rectified spirit of wine affords a proof of this; the spirit dissolving the varnish, and leaving the silver-leaf of its own whiteness. For plain frames, thick tin-foil may be used instead of silver. The tin-leaf fixed on the piece with glue, is to be burnished, then polished with emery and a fine linen cloth, and afterwards with putty applied in the same manner: being then lacquered over with the varnish five or six times, it looks very nearly like burnished gold. The same varnish, made with a less proportion of the colouring materials, is applied also on works of brass; both for heightening the colour of the metal to a resemblance with that of gold, and for preserving it from being tarnished or corroded by the air.

Oil Varnishes.—Gum copal and amber are the substances principally employed in oil varnishes; they possess the properties necessary for varnishes, solidity, and transparency.—The copal being whitish, is used for varnishing light, the amber for dark colours. It is best to dissolve them before mixing them with the oil, because by this means they are in less danger of being scorched, and at the same time the varnish is more beautiful. They should be melted in a pot on the fire; they are in a proper state for receiving the oil when they give no resistance to the iron spatula, and when they run off from it drop by drop. The oil employed should be a drying oil, and perfectly free from grease. It should be poured into the copal or amber by little and little, constantly stirring the ingredients at the same time with the spatula. When the oil is well mixed with the copal or amber, take it off the fire; and when it is pretty cool, pour in a greater quantity of the essence of turpentine than the oil that was used. After the varnish is made, it should be passed through a linen cloth. Oil varnishes become thick by keeping; but when they are to be used, it is only necessary to pour in a little essence of turpentine, and to put them for a little on the fire. The turpentine is necessary in oil varnishes to make them dry properly; generally twice as much of it is used as of oil. Less is necessary in summer than in winter. Too much oil hinders the varnish from drying; but when too little is used, it cracks and does not spread properly. We shall subjoin the most useful oil varnishes:

White Copal Varnish.—On sixteen ounces of melted copal pour four, six, or eight ounces of linseed oil, boiled and quite free from grease. When they are well mixed, take them off the fire (not forgetting to stir them properly); and when pretty cool, pour in sixteen ounces of the essence of Venice turpentine. Pass the varnish through a cloth.—Amber varnish is made in the same way.

Essential Oil Varnishes.—The only essential oil varnishes used are, as has been observed, for pictures. Picture varnishes should be white, light, and quite transparent, which will preserve the colours without giving them any disagreeable tint; and it should be possible to take them off the picture without injuring it. They are usually made of gum mastich and turpentine dissolved together in some essential oil. The varnish is passed through a cloth, and allowed to clarify. It is applied cold to the picture.

Varnishes before they are used should be carefully kept from dust, which would spoil them; and they should be kept in a vessel quite clean and dry. When used, they should be lifted lightly with the brush, and spread upon a ground altogether free from dirt and moisture. The substance, after being varnished, should be exposed to the heat of the sun, or placed in a warm room covered with a glass case, to keep out all filth. Oil varnishes require more heat than alcohol varnishes. The varnish should be put on very quickly, making great strokes with the pencil or brush, taking care that these strokes never cross one another; it should be spread equally, and never thicker than a leaf of paper; a second coat should not be put on till the first is quite dry. If the varnish, after being put on, becomes dull and uneven, it must be taken off entirely, and new varnish put on.

Varnishes are polished with pumice-stone and tripoli earth. The pumice-stone must be reduced to an impalpable powder, and put upon a piece of serge moistened with water; with this the varnished substance is to be rubbed lightly and equally. The tripoli must also be reduced to a very fine powder, and put upon a clean woollen cloth moistened with olive oil, with which the polishing is to be performed. The varnish is then to be wiped with soft linen, and, when quite dry, cleaned with starch or Spanish white, and rubbed with the palm of the hand or with a linen cloth.

To recover colours or varnish, and to take off the dirt and filth which may adhere to them, a ley is used made of potash and the ashes of lees of wine.

The *Chinese varnish* is not a composition, but a resin which exudes from a tree called in China *tsi-chu*, "varnish-tree." This tree grows in several provinces of the southern parts of China. They do not procure varnish from the tsi-chu until its trunk is nearly five inches in diameter, which size it seldom attains to before seven or eight years. Varnish extracted from a tree smaller or of less age would not have the same body and splendour. This liquor distils only in the nighttime, and during the summer season. To cause the gum to flow, they make several rows of incisions round the trunk, the number of which is proportioned to the vigour of the tree. The first row is seven inches from the earth, and the rest are at the same distance one from the other, and continue to the top of the trunk, and even sometimes on the boughs which are of sufficient strength and size. The Chinese use a crooked iron for making these incisions, which must run a little obliquely, and be equal in depth to the thickness of the bark; they make them with one hand, and with the other hold a shell, the edges of which they insert into the opening, where it remains without any support. These incisions are made towards evening, and next morning they collect the varnish which has fallen into the shells; the following evening they are again inserted, and this operation is continued until the end of summer. A thousand trees yield almost in one night twenty pounds of varnish.

While the varnish distils, it exhales a malignant vapour, the bad effects of which can only be prevented by preservatives and great precaution.

Varnish, among medalists, is the term used to signify those hues which antique medals have acquired by lying in the earth. The beauty which nature alone is able to impart to medals, and which art has never yet attained the power of counterfeiting, enhances their value. The colours acquired by certain metals from having lain a long while in the ground are various, and some of them exquisitely beautiful. The blue nearly rivals that of the turquoise; others have an inimitable vermilion colour; others, again, a polished shining brown. But that most usually found is a delicate green, which hangs to the finest strokes without effacing them more accurately than the finest enamel

does on medals. No metal except brass is susceptible of this: the green rust which gathers on silver always spoils it, and must be removed with vinegar or lemon juice. See *Preservation of Medals*, in MEDALS.

Falsifiers of medals have a varnish which they use on their counterfeits to give them the appearance of being antique. But there are means of discovering these deceptions. See PATINA.

VASCULARIUS. [Lat.] *In archaiology.* An artist employed in the fabrication of vases, without any ornaments in rilievo.

VASE. [*vas*, Lat.] *In modelling, sculpture*, &c. The Grecian artists took care to give to every vase, or other utensil, that shape which appeared best adapted to its destined use, and at the same time most agreeable to the eye. Sometimes they took the parallelipipedon for a vase, because the eye was thought most easily to accommodate itself to that form. In other instances, they adopted a shape either circular or slightly curved, to prevent the eye from being intercepted by angles or corners. These shapes admitted, at the same time, of greater variety, notwithstanding which however its primitive character was always perceived, how numerous soever might be the ornaments with which the vessel was charged. It was only in times subsequent to the decline of the arts that these simple contours were departed from, and the pyramidal or angular figure substituted.

The ancients did not always estimate the value of a vase according to the price of the substance composing it. Sometimes, even, vases of simple terra-cotta or of stone, and more particularly of any matter not commonly so appropriated, were preferred to others of gold or silver. At the same time, speaking generally, very rich and precious substances were employed by those who could afford such profusion.

Vases were frequently set up as prizes in the public games. It is upon this account that upon medals, and other monuments relating to these festivities, we often see vases adorned with palm-branches.

A vast number of these vessels have been preserved to the present day; and these curious relics become of great importance to us, not only because they make us specifically acquainted with ancient art, but also inasmuch as they offer to our own artists models of the most beautiful forms, and of the care with which their execution ought to be accompanied. It is indeed to the study and contemplation of these beautiful examples that we may fairly attribute the improvements latterly experienced in taste for the fine arts generally, and in perception of the truly graceful and elegant.

Of all the works in this department of Grecian art which have come down to our times, there are none so richly meriting attention as the ancient vases in terra-cotta so long and universally, but so improperly designated as *Etruscan*. They have been thus denominated from the circumstance of their original describers (Montfaucon, Dempster, Gori, Passeri, Caylus, and D'Hancarville) having regarded them as monuments of Etruscan art. But the fact is, that the greater number of these vases was not found in Etruria. It is to the sepulchres of Nola, of Capua, of Santa Agatha, &c. as well as to different cities of *Græcia Magna*, that we are indebted for the largest and finest collections. The Athenian tombs have also furnished many. Our celebrated countryman, Hawkins, brought several away with him, which he had discovered in sundry Grecian towns. These vases, then, are by no means to be held peculiar to Etruria; and Mr. Hamilton is correct in designating them, as he has done in one of his prefaces, emphatically *Grecian*.

The tombs, or sepulchres in which this exquisite class of vases were commonly found, were situated near the walls of towns, and were of small depth, if we except those of Nola, where volcanic eruptions had considerably raised the ground since the tombs were first constructed, so that, in some instances, they were sunk twenty-six palms below the surface of the earth. The tombs are ordinarily built of brick or rough stone, and have just sufficient size to admit the body, with some five or six vases round it, more frequently on the right than on the left side. The number, size, and beauty of these vases varied, doubtless, according to the rank of the party inhumed.

The paintings of these ancient Greek vases are extremely interesting; not only on account of the subjects represented, but also on account of the beauty of the workmanship. The antiquary and the artist are alike fascinated by their study.

The subjects most frequently to be found are sacrifices, processions, and representations which bear relation to the mysteries of Bacchus or Ceres. There are occasionally, but not so often, exhibitions of family feasts or of public games. Sometimes also the mythics of the heroic ages (see MYTHIC CIRCLE) are introduced.

The drawing of the figures approaches to perfection. Justness and purity are combined with freedom and grace. The COMPOSITION (see that word) is simple; often we see nothing but single figures placed one beside another; but the position of these is always noble, and groups are displayed with the utmost skill and effect.

In the 1st vol. of the 2d Collection of Hamilton's Vases, published by Tischbein, Mr. Hamilton thus expresses his opinion of the process which the ancient masters adopted in painting these vases. He thinks that, with respect to those vases whereon yellow figures are engraven on a black ground, the figures had been first cut out in some flexible matter similar perhaps to our paper, and subsequently applied on the vase; that afterwards the other parts of the surface of the vase were covered with a black varnish, which when the substance of the figures in question was taken away, was likewise applied to the *outlines* of those figures, which of course themselves remained in the natural colour of the vase. This opinion however, he seems to have afterwards renounced, in favour of another which presumes the designs to have been traced with a pointed instrument on the earth of the vase itself, while yet soft.

Thericlean Vases were, no doubt, such as were made use of to drink from on festive occasions.

As to the *vases* of the theatre, their theory and construction are to the moderns entirely unknown: but to investigation, their history is nevertheless curious: all we know of them is what Vitruvius reports, which is as follows: "Of the *brazen vases*, which are used on account of the magnitude of theatres, they are so formed, that upon being struck, they sound in themselves the notes *diatessaron, diapente*, and so in order to *disdiapason;* after which they are disposed, according to the laws of music, in cells, formed within the seats of the theatre in such a manner, as not to touch the wall, and have a vacancy all round them, to the top of the cell. They are situated inversely, and on the side which is turned toward the scene; they are supported by wedges, not less than half a foot high; also opposite the cells, in the beds of the lower seats, apertures are left, two feet long, and half a foot high. Rome has not any theatre thus constructed; but the provinces of Italy, and many cities of Greece, can show them. Lucius Mummius, who destroyed the theatre of Corinth, brought to Rome the vases of brass; and which were used at the plays acted in his triumph: likewise many ingenious architects, who construct theatres in small towns, to save expense, make use of *earthen vessels* to help the sound, which being adjusted according to rule, answer the purpose."

Sometimes inscriptions have been found upon the Greek vases, but rarely the name of the artist by whom the painting is executed (See EPOESI). In the 2d vol. of MILLIN'S *Monumens Inédits*, will be found a vase upon which may be read the name of the artist *Taleides*. Occasionally the name of the person to whom the vessel was offered is inscribed with the addition of the word καλὸς. See KALOS.

We possess three works more particularly devoted to the examination and history of Grecian vases. These are:—*Picturæ Etruscorum in Vasculis*, by PASSERI, Rome, 1767 and 1770, 4 vols. folio. The figures, as represented in this work, however, by no means equal the beauty of the originals. D'HANCARVILLE, at a later period, published the vases of Hamilton's first collection under the following title;—*Etruscan, Grecian, and Roman Antiquities, drawn from the Cabinet of* HAMILTON, Naples, 1768, 4 vols. fol. This publication does not always render the originals with sufficient fidelity: besides which ground of complaint, another still more considerable is, that the subjects painted upon the same vase are often dispersed over various plates in different parts of the same volume, and occasionally even of different volumes; whilst the explanations are never to be found at the same place as the engravings.

Mr. Hamilton having disposed of his first collection, which was transferred to the British Museum, set about forming a second, which is the one published by Tischbein. This work does not give coloured prints, but contents itself with presenting simple outlines of the paintings, which it seems not unfrequently to embellish. M. Italinsky digested the explanations to this performance, which appeared in 4 vols. at Naples, in the year 1791, thus entitled:—*Collection of Engravings after antique Vases, the greater part of Grecian workmanship, and found in Tombs in the Kingdom of the Two Sicilies, but principally in the Environs of Naples, during the Years* 1789 *and* 1790; *drawn from the Cabinet of the Chevalier* HAMILTON, *published by* G. TISCHBEIN, *Direct. of the Royal Academy of Painting at Naples.*

Grecian vases are likewise to be found in almost every collection of any ancient monuments. DEMPSTER has presented

some in his *Etruria Regalis;* MONTFAUCON, in his *Antiquité Expliquée;* WINCKELMANN, in his *Monumenti Inediti;* CAYLUS, in his *Recueil d'Antiquités;* and, to conclude, MILLIN, in his *Monumens Antiques Inedits.* See LAMP, PATERA, TOMB, URN, &c.

VAULT. [Ital. *volto*, Fr. *voute.*] *In architecture.* An arched roof, so contrived that the stones which form it sustain each other. Vaults are on many occasions to be preferred to soffits or flat cielings, as they give a greater height and elevation, and are besides more firm and durable.

The art of constructing vaults does not appear to have been known to the people who, anteriorly to the Greeks, were accustomed to the exercise of architecture; at least, we find no examples of them in the ruins of Indian or Egyptian edifices. The Greeks, therefore, may perhaps be regarded as the inventors of vaults; but at the same time it is obvious that this species of building was understood among them very early, and it is possible might have been adopted from some more primeval people. The *cloaca*, or common sewers of Rome were built by Etruscan architects (according to tradition) under the directions of Tarquin the Elder. The *Museum Etruscum* of GORI (1st vol. diss. 1, chap. 5) may be consulted with advantage as to the ancient construction of vaults, and any elementary work on ARCHITECTURE (see the list at the end of that article) will afford the student practical information.

VEHICLE. [Lat. *vehiculum*, from *veho*, to carry.] *In archaiology.* See CAR.

VEIL. [Lat. *velum*, from *velo*, which from εἰλέω, to surround or envelop.] *In archaiology.* A piece of stuff serving to cover either the entire head, or the countenance. It was worn in a variety of ways by the ancients, and is often introduced upon statues. The reader is referred for a quantity of curious information on the subject to a work by M. KŒHLER, entitled *Description of an Amethyst in the Cabinet of engraved Stones of the Emperor of Russia,* Petersburgh, 1798, 8vo.: which amethyst was formerly in the collection of the Duke of Orleans, and is represented, among other stones, in the *Description des Pierres gravées de M. le Duc d'Orleans,* tom. ii. pl. 11. Kœhler explains it to be Hercules, or perhaps his priest, in the habit of a female crowned with laurels, and covered with a transparent veil.

VEINS. [*veine*, Fr. from *vena*, Lat.] *In sculpture, &c.* In the later times of sculpture, it has been believed that peculiar talent is displayed in pronouncing the veins in a strongly marked manner, which is however contrary to the practice of the ancients. Upon the arch of Septimius Severus, we may remark veins extremely prominent on the hands of several ideal figures of women, such, for instance, as victories bearing trophies; as if force, which is a general quality of the hand, needed expression in this way. Nothing shows better with what delicacy and beauty the artists of the really flourishing periods of art could express these parts of the human frame, even in colossal statues, than the Torso, formerly in the *Musée Napoleon;* the neck of a colossal head of Trajan, in the Villa Albani; and other relics of antiquity.

VELLUM. [*velin*, Fr.] *In painting.* Prepared calfskin, which being finer in texture and smoother than parchment, is often used in drawing and painting in miniature. See PARCHMENT.

VELUM. See VEIL.

VELVET. [Fr. *velours*, Ital. *velluto*, from Lat. *villus*, the nap of cloth.] *In painting.* The art of painting on this rich substance has been latterly brought to a very high degree of perfection. The principal and best manufactories of velvet are in France and Italy.

VENEERING. [from the verb.] *In musaic work.* A kind of marquetry, or inlaying, whereby several thin slices or leaves of fine wood, of different kinds, are applied and fastened on a ground of some common wood. There are two kinds of inlaying: the one, which is the more ordinary, goes no farther than the making of compartments of different woods; the other requires much more art, and represents flowers, birds, and the like figures. The first kind is what we properly call *veneering;* the latter we have already described under MARQUETRY (which see). The wood intended for veneering is first sawed out into slices or leaves, about a line thick: in order to saw them, the blocks or planks are placed upright in a kind of vice or sawing press: the description of which may be seen in any work on the subject. These slices are afterwards cut into slips, and fashioned divers ways, according to the design proposed; then the joints being carefully adjusted, and the pieces brought down to their proper thickness, with several planes for the purpose, they are glued down on a ground or block of dry wood, with good strong English glue. The pieces thus joined and glued, the work, if small, is put in a press; if large, it is laid on the bench, covered with

a board, and pressed down with poles or pieces of wood, one end whereof reaches to the cieling of the room and the other bears on the boards. When the glue is quite dry, they take it out of the press and finish it; first with little planes, then with divers scrapers, some whereof resemble rasps, which take off dents, &c. left by the planes. When sufficiently scraped, the work is polished with the skin of a sea-dog, wax, and a brush and polisher of shave-glass: which is the last operation.

VENETIAN. [from Venice.] *In the history of the arts.* Appertaining to the state or people of Venice. See ARCHITECTURE, PAINTING, SCHOOLS OF ART, VENICE, &c.

VENICE. [*Venetia*, Lat.] *In the history of the arts.* A city of Italy, and capital of a republic. This city makes a very grand appearance at a distance, as seeming, from its being built on a multitude of islands, to float on the sea; or rather, with its stately buildings and steeples, as it were rising out of it. The number of these islands is uncertain; some reckoning sixty; others seventy-two; and others again making them amount to one hundred and thirty-eight; but the latter must comprehend, in their calculation, all those places which have gradually been raised in the Laguna, and, by driving piles in the ground, fitted for building on. The Laguna, or marshy lake, which lies between the city and the continent, and five Italian miles in breadth, is too shallow for large ships; but, by the attention of the republic, was prevented from becoming part of the continent, or from being ever frozen, so as to bear an army. Towards the sea, the access to the city is also difficult; but the safe and navigable parts are indicated by piles; which, at the approach of an enemy's fleet, can be cut away. The several canals, leading to the city among the sand banks and marshy shallows, are, though at a vast expense, kept clear of the mud and slime the flood brings with it. The return of the sea is something later here than every sixth hour, and it generally rises between four and five feet, keeping the water between the islands of the city in continual motion. Some of these canals being very narrow, the mud is not so effectually carried off as to prevent ill smells in hot weather. The great canal, which winds through the city, and divides it into two parts, is thirteen hundred paces long. The best way of going up and down the city is in gondolas, which, indeed, strike the eye with a mournful appearance, being all lined either with black cloth or serge, or painted black. Over the several canals are laid four hundred and fifty (some say upwards of five hundred) bridges, great and small, and the better part of them stone: the highest and longest is the Rialto, which, in the midst of the city, crosses the great canal at its narrowest part, where it is but forty paces broad. This bridge consists only of one single arch, whose foundation takes up ninety feet, resting on twelve thousand elm piles, and everywhere incrustated with marble. It is said to have cost the republic two hundred and fifty thousand ducats. In the upper part it is thirty-seven common paces broad, with two rows of shops, forming as it were three streets, of which that in the middle is the widest. At each end is an ascent of fifty-six steps. The city may, indeed, everywhere be traversed on foot; but the streets are very narrow, and the free-stone pavement very slippery in wet weather. The many small bridges, with their steps, are also not a little troublesome. The whole city is said to be six Italian miles in circumference, and to make the tour of it in a gondola takes up somewhat more than two hours. Venice contains seventy parish churches, besides others, fifty-four convents of monks, twenty-six nunneries, seventeen rich hospitals, eighteen oratories, forty religious fraternities, with their chapels (among which are six called Scuole Grandi), fifty-three squares, one hundred and sixty-five marble, and twenty-three half, statues. The buildings, indeed, are all of stone; but the greater part make so mean a figure, that this city, in point of beauty and elegance, can in nowise stand the test with many others. St. Mark's Square, it is true, is very fine, and so are the several stately marble palaces that border upon the great canal, though most of them are of Gothic architecture. In the churches and convents, the most admirable part are the paintings; and indeed, Venice, highly renowned for fine paintings, far surpasses, in the opinion of many, even Rome itself.

Venice is divided into six parts, called *Sestiere*, *Sestieria*. S. Marco contains the piazzo di S. Marco, with the adjacent buildings. This square, the pride of the city, forms a right angle, the shortest side of which, two hundred and forty paces long, and seventy-five broad, reaches along the ducal palace. The ducal palace, towards the water-side and St. Mark's place, is entirely Gothic; but on the side of the small canal, and in the court, of modern architecture, and mostly of marble. It not only served for the residence of the Doge, but also for the meeting of the council.

The finest ornaments of the council-chamber and other apartments, are the paintings of famous ancient masters. In one side of the palace, towards the canal Rio di Palazzo, dark prisons, strongly secured with iron grates, present themselves to view. The lower gallery, or arched walk, on the side of St. Mark's square, together with the opposite hall, is called Broglio. Here, at a certain hour of the day, the nobles took their walks; and, at this time, no Venetian, of an inferior rank, might be seen on it, though a foreigner, as supposed unacquainted with the custom, was not desired to quit the place. That part of St. Mark's square, between these two buildings and the piazza, receives an additional ornament from two pillars of oriental granate, on one of which stands St. Mark's lion in brass, and on the other, a marble statue of St. Theodore. Contiguous to the north part of the Doge's palace, is St. Mark's church. Its materials justly entitle it to be called magnificent, being, both on the out and inside, covered with fine marble: but the architecture is entirely Gothic. The best part of it are the Musaic paintings, and the four brass horses, formerly gilt, standing over the great door, and said to have been brought here from Constantinople.

In the Sestieria di Castello, is the so much celebrated arsenal or dock, two Italian miles and a half in circuit, walled and moated in, with twelve towers along its walls; and within the enclosure a great variety of buildings, in which every thing requisite for a land or sea armament was kept in readiness. These buildings consist of an armoury, storehouses for ironwork, oars, cordage, bullets, tar, canvas, guns, &c. a rope-house, a saltpetre-house, smith's forges, a foundry, basons and slips for ship building, &c. Within it lay the men-of-war, frigates, galleys, and other vessels, with the Bucentauro, which was also laid up here. In the Sestieria di Canale Regio is the theatre.

On the invasion of Italy, in the fifth century, by the Huns, under Attila, and the general desolation that everywhere appeared, great numbers of the people, who lived near the Adriatic, took shelter in those islands where now stands the famous city of Venice; and which islands, about the year 421, particularly Rialto, had, in some measure, been built upon by the Paduans, for the advantage of commerce. Here having settled their small places or states, they were at first governed by consuls; afterwards by tribunes, and formed a kind of republic, the council of which was represented by the persons of these magistrates. These islands became still better inhabited on the succeeding incursions of the Goths and Longobardi into Italy; multitudes from Rome and other large cities repairing hither, so that this state became soon able to make some head against those bold invaders. At length the chiefs of the islands and the Longobardi came to an agreement, whereby the former were to remain unmolested. This was the commencement of the city and state of Venice.—Alas, how fallen!

Venus. [Lat. from *venio*, to come, according to Cicero, in allusion to the universality of love. Another author deduces it from *φαίνω*, to shine.] *In mythological painting and sculpture.* One of the most celebrated deities of the ancients. She was the goddess of Beauty, the mother of Love, the queen of Laughter, the mistress of the Graces and Pleasures, and the patroness of courtesans. She is fabled to have sprung from the froth of the sea, after the mutilated part of the body of Uranus had been thrown there by Saturn.

The dominion of Venus over the heart was assisted and supported by a celebrated girdle called *zone* by the Greeks, and *cestus* by the Latins. This mysterious cincture gave beauty and gracefulness when worn even by the most deformed; whilst it excited love and rekindled extinguished desires.

The worship of Venus was universally established: statues and temples were erected to her in every kingdom, and the ancients delighted in paying homage to a divinity who presided over generation, and by whose influence alone mankind existed. In her sacrifices, and in the festivals celebrated in her honour, much licentiousness prevailed, and public prostitution was often part of the ceremony.

Venus is represented with one of the prettiest, as Minerva is sometimes with one of the handsomest faces that can be conceived.

Her look, as represented by the artists and poets, has all the taking airs, wantonnesses, and graces they could give it. Her shape is the most exact imaginable, all soft, and full of tenderness; the fineness of her skin, and the beauties of her complexion were so exquisite, that it required the utmost skill of Apelles to express them. Her eyes were either wanton, or quick, or languishing, or insolent, according to the occasion; and her face and air agreed with them. The poets are fuller, as to the eyes, than any statue or picture can be. The sculptors can only give the

proportion of things, and one single attitude in a statue. The painter can do the same, and add the natural colours; and, by the help of lights and shades, can throw things into proper distances. The poets can describe all this, and can farther put the figure into a succession of different motions in the same description. This must give the poet an advantage in describing the quick and uncertain motions of Venus's eyes, and occasions the meeting with expressions which cannot be explained from statues or paintings. Such the epithet *pæta*, which refers, perhaps, to a certain turn of Venus's eye, and her catching it away again the moment she is observed, Ovid. Art. Am. ii. v. 657. Her eyes are well described by Silius, De Bell. Pun. l. xv. v. 27. She is frequently described too as having a treacherous smile on her face. But, however she appears, or whatever she is doing, every thing about her is graceful, bewitching, and charming.

Venus, in all attitudes, is graceful, but in no one more so than in that of the Venus of Medici; where, if she is not really modest, she, at least, counterfeits modesty extremely well. This attitude might be described in two verses of Ovid. (Art. Am. ii. v. 614, 615.) This statue, as to the shape, will ever be the standard of all female beauty and softness. Her breasts are small, distinct, and delicate, to the highest degree. Her waist is not represented as stinted by art, but as exactly proportioned by nature to all the other parts of her body. Her legs are neat and slender, the small of them is finely rounded, and her feet are little, pretty, and white. The general tenderness, elegance, and fine proportions of her whole make seem to take a great deal from the beauty of her face, or the head is really (as has been suspected) not of the same artist who made the body. Some have fancied that there are three different passions expressed in the air of the head, in which the face is a little turned away from you. At your first approaching her, aversion appears in her look; move one step or two, and she has a compliance in it; and one step more to the right turns it into a little insulting smile, as having made sure of you: but some unimaginative persons cannot find out this malicious smile, though they often view the statue on purpose.

Besides the insidious smile in some figures, Venus is represented in others smiling, and in a wheedling posture. Such, probably, was the figure of the Venus Erycina, called by Horace, Erycina Ridens; (Hor. i. od. 2, v. 33.) Such also was the Venus Appias, a statue of whom stood near the forum, where the lawyers pleaded; and such was the design on the medal of Aurelius, in which Venus is begging some favour of Mars. This was inscribed to Veneri Victrici, as sure of carrying her point. Thus also in a statue at Florence, Venus holds one of her hands round Mars's neck, and the other on his breast; and seems enticing him to grant her request. She is represented in this manner with others, as well as with Mars (Virg. Æn. viii. v. 394). In a rilievo at Turin, Venus is caressing Jupiter in the same manner as she does Mars in the Florentine statue.

Venus is also frequently represented as the genius of indolence, lying in a languishing posture on a bed, and generally attended by Cupids to execute her orders. Some of these figures, possibly, were originally meant for the goddess Desidia, who might more easily be mistaken for a Venus than for a Cupid, as she was apt to be among the ancients themselves. This Venus appears in one of the finest coloured pictures left us by the ancients. It is in the Barberini palace at Rome. The air of the head may be compared with Guido's, and the colouring with Titian's. The lost part, restored by Maratta (though a noted painter) serves to do honour to the paintings of the ancients. Venus is described by Statius as in this picture, l. i. Sylv. v. 56.

On an ancient sepulchral lamp she is yet more indolent; as not only herself, but the Cupids about her are all fast asleep. As this was found in a sepulchre, it probably related to some fine lady buried there with her children. Death being so like Sleep, at first, that it has been generally compared to it.

Venus, by the poets of the third age, is represented under a quite contrary character, as the goddess of jealousy, or the furious Venus. Flaccus and Statius, in their account of the women of Lemnos killing their husbands, at the instigation of Venus, describe her like a fury in black robes, and armed with a torch, a sword, and with serpents, the attributes of the Furies.

The attendants of Venus were the Cupids, the Nymphs, and the Graces. The Cupids were supposed to be numerous; but there were two most remarkable, one of which caused love, and the other made it cease. Hence Venus is called the mother of the two Cupids.

The two Cupids with the dolphin at the foot of the Venus de Medici are supposed,

to be these, and are now called by the antiquarians at Florence, Eros, and Anteros.

Cupid is generally represented as a child of seven or eight years old, almost always naked, handsome, inclining to plumpness, and sometimes a little idle and sly. His hair is soft and fine, and sometimes dressed up. His wings ornamental as well as useful, and probably in paintings were of divers colours. His quiver, bow, and darts, are continually mentioned to this day. The poets give him sometimes a lighted torch, and arrows tinged with fire. In a statue at the Venere near Turin, he appears as a youth of seventeen, as he does in Raffaelle's Cupid and Psyche.

The poets and artists represent their Cupids either as playful or as powerful. Hence in gems and other pieces, they are seen in some little diversion, as driving a hoop, playing at quoits, and wrestling or fighting in jest; but more especially as catching and tormenting butterflies: but this may be brought as an instance of Cupid's power over the beings of the air.

His power over the other elements is variously expressed: over the earth, by riding on a lion with a lyre in his hand, and the savage seeming to listen: over the sea, by being seated on a dolphin: and in heaven, by breaking the fulmen, or fiery bolt of Jupiter. Sometimes Cupid is riding on a centaur, who has his hands tied behind him; sometimes on a chimæra, &c. to show that Love conquers the fiercest monsters. Neptune's dominion over the sea is also denoted by a dolphin in his hand.

Cupid was so constant an attendant on Venus, that he may be reckoned one of her attributes: as the Bambino (or little image of Christ) is now of the Virgin Mary, by the artists (and perhaps by the people) in Italy. This has led them into such strange petitions as *jure matris filio impera*, and the like. The child is as much a mark of the Virgin as the serpent under her feet, or the crown of stars over her head. The other attendants of Venus are the GRACES and NYMPHS (which refer to).

VERDIGRIS. [Fr. *verd-de-gris*, or perhaps Lat. from *viridis*, green, and *æs*, brass.] *In painting.* The acetric of copper; greatly used among painters as a green colour. It is much preferred in oil paintings for garden scenery, &c. It serves also, mixed with cream of tartar, to make a kind of water green, for colouring maps or prints.

VERMICULATED. [Lat. *vermiculus.*] *In the art of blazing.* Wrought in chequer work, or pieces of divers colours.

VERMILION. [*vermeil, vermillon*, Fr.] *In painting.* An extremely bright and beautiful red colour, composed of quicksilver and sulphur, in great esteem among the ancients under the name of *minium.* That preparation, however, which bears amongst us the name of *minium* is of lead, known also as *redlead.* See MINIUM.

VESTAL. [Lat. *vestalis*, from *Vesta*, a goddess of fire.] *In archaiology.* A priestess of Vesta, entrusted with the charge of the sacred fire. They were at first only four in number, but afterwards increased to six, the superior being denominated *vestalis maxima.* The habit of these virgins consisted of a headdress, called *infula*, which sat close to the head (and from whence hung certain laces called *vittæ*), a kind of surplice made of white linen, and a purple mantle over it, with a long train.

VESTIBULE. [Lat. *vestibulum*, an open space before the door of a house, where the altars of *Vesta* were commonly raised.] *In architecture.* A sort of entrance into a large building; being an open place before the hall or at the bottom of the staircase.

VESTRY. [Lat. *vestiarium*, a wardrobe.] *In architecture.* A room adjoining the open church wherein the vestments of the minister are kept, and parish meetings held, &c.

VICTORY. [*Victoria*, Lat.] *In archaiology.* Victory is represented with wings, and almost in the attitude of flying, with her robe as carried back with the wind. She holds in her hand, as the reward of great conquerors, a laurel crown, which, with the palm branch and a trophy, were her general attributes. Her wings and robe are described as white. She is sometimes hovering between two armies engaged, as doubtful which side to choose; and sometimes standing fixed to the army she is resolved to favour.

Victory is represented as drawn by two horses, particularly in the Roman family medals, which had their name from her. There was a picture at Rome, in which she was ascending to heaven in a chariot drawn with four horses, as she appears on the Antonine pillar carrying up her hero thither. The trophy was a proper mark for her at Rome, as there was one or more before the door of every officer who had gained any advantage over their enemies.

VIGNETTE. [Fr.] *In painting and engraving.* A pictorial embellishment introduced into the titlepage, or in fact into any page of a book, but not occupying it wholly.

VILLA. [Lat.] *In architecture.* A country-house. A rural mansion, or retreat, for wealthy men.

In constructing their country-houses, the Greeks were careful to select, for the proprietor, a situation which should be warm in winter and shady in summer. The apartments for the women here, as well as in the town-houses, were separated from those of the men by halls and baths. Adjoining these villas were generally spacious gardens filled with plants and fruits, and beyond stretched the open fields, vineyards, or plantations of olives.

The love and enjoyment of these country-seats was, however carried by the Romans to a still greater extent than by the Greeks, and they were accordingly rendered much more extensive and magnificent.

The Roman villas consisted of three parts, one called the *Urbana*, a part where the master and his family dwelt, the other the *Rustica*, destined for the uses of husbandry; and the third the *Fructuaria*, or receptacle for the fruits of the earth.

In the choice of situation and aspect, the Romans were very particular, the latter requiring peculiar attention, as only by the aspect of the buildings and rooms, could they be rendered conveniently habitable in bad weather; glass for windows being then little known, and its substitutes costly, and not in general use.

Vitruvius has given us the following rules: the winter triclinium (dining-room) and bath should look to the winter's declining sun, because the afternoon light is there useful; besides the western sun shining thereon produces heat, and makes that aspect warm and pleasant in the evening; bed-chambers, and libraries, should look to the east, for in these the morning light is required; it is also proper, that the books in libraries may not decay, for in those that look to the south and west, they will be damaged by damps and worms, which the humid winds generate and nourish. The spring and autumn triclinia should look to the east, for the windows being then turned from the sun, proceeding westward, render those places temperate at the time they are generally used. The summer triclinium should look to the north, because this aspect is not, like the others, rendered hot at the summer solstice; for being turned from the course of the sun, it remains always cool, and when used, is salubrious and pleasant. To the same aspect also, should be disposed Pinacotheca (picture rooms), as well as embroidering and painting rooms, that the colours used in the works, on account of the equality of the light, may remain unchanged.

The better to convey an adequate idea of the extent, accommodation, and grandeur of the villas of the Romans, we will add Pliny's (the consul) description of his villa at Laurentum. It may be proper to observe, that this villa was considered as on a small scale.

After describing the route, the views on the road, &c. he adds, my villa is large enough to afford a convenient, though not sumptuous reception for my friends. The part which first presents itself is the *atrium* (court-yard), plain, but not mean; then the *portico*, in form of the letter O, which surrounds a small, but pleasant area; this is an excellent retreat in bad weather, being sheltered by glazed windows, but more by the projection of the roof. Beyond the *portico* is a pleasant *cavædium* (open court), passing which, is a handsome *triclinium*, which advances upon the shore, so that it is gently washed by the waves, when the south-west wind blows. On every side are folding doors, or windows as large, so that from the sides and the front, you enjoy a prospect, as it were, of three seas, and backwards are seen the *cavædium*, the *portico*, and the area; again the *portico* and *atrium* terminated by woods and distant mountains. On the left of the *triclinium*, but not so forward, is a large *cubiculum* (chamber or apartment), and then a smaller one, where one window admits the rising, and another the setting sun. From hence, you view the sea rather more distant, but more securely. This *cubiculum* and *triclinium*, by their projecture, form an angle, which not only retains, but augments, the heat of the sun's rays.

Here then is my *hybernaculum* (winter room or apartment) and the *gymnasium* (place for exercise) for my family, which is never incommoded by any winds, but such as bring cloudy weather, and destroy the otherwise serene situation of the place. Adjoining to this angle, is a *cubiculum* of a curved or round form, the windows of which admit the sun of consequence through its whole course. In the walls are inserted library presses, furnished with books more for amusement than study; close to this is the *dormitorium* (sleeping room) separated by a space having a covering of wood work, which collects and distributes the vapour to the room in salubrious temperament. The remainder of this wing is allotted to my ser-

vants and slaves; yet, is generally sufficiently neat for visiters.

On the right side of the *triclinium*, is a most elegant *cubiculum* with another large *cubiculum*, or moderate *cœnatio* (common eating, or supper room), which receives light both from the sun and the sea; after this is a *cubiculum*, with a *procœton* (servants' room)—for height, a summer, but for shelter, a winter apartment, being screened from all winds: a wall only separates another *cubiculum* with its *procœton*. There you enter the spacious and extensive *cella frigidaria* of the bath; against the walls of which are two projecting *baptisteria*, sufficiently large to swim in; joining to this is the *unctuarium*, the *hypocaustum*, and *propnigeon* of the baths; and two other cells more elegant than sumptuous. Skilfully contrived, adjoins the *callida piscina* (warm bath), where those who swim enjoy a view of the sea: not far distant is the *sphæristerium* (tennis court, of a circular form), which enjoys the warmest rays of the declining sun.

Here arises a *turris* (pavilion, or summer-house), under which are two *diætæ* (suites or sets of apartments), and two also above, besides a *cœnatio*, from which is a beautiful prospect of the sea, the distant coast, and several pleasant villas; there is also another *turris*, containing a *cubiculum*, exposed to the rising and the setting sun; behind this, are an *apotheca* and *horreum* (cabinets, or store rooms), and underneath a *triclinium*, where the noise of the sea is not heard, but only in storms, and then but faintly. This looks on the *gestatio* (a place to exercise on horseback, or in a carriage); and the garden which it surrounds.

The *gestatio* is encompassed with box, or rosemary, where the box is wanting; for box, when well sheltered, flourishes much, but withers, if exposed to the wind, or weather, or to the spray of the sea. To the inner circle of the *gestatio* is joined a shady row of young vines, with a walk, soft and pleasant even to the naked feet. The garden abounds with fig and mulberry trees, to which the soil is suitable, but not to other trees. The prospect here, not less pleasant than that of the sea, is enjoyed from a *cœnatio*, rather distant from the sea; on the back it is encompassed with two *diætæ*, whose windows look to the vestibule of the villa, and to a fruitful kitchen garden.

Hence, a *crypto-porticus* (a long inclosed room, or portico) extends, for size comparable to a public building, with windows on both sides; those next the sea, the most numerous; on the garden side they are single, with fewer in the upper row. These, when the day is serene and calm, are all opened; but when the wind is troublesome, those on the opposite side are opened without any inconvenience. Before the *crypto-porticus* is a *xystus* (a spacious place for exercise, or a terrace), fragrant with violets, in which the heat of the sun is increased by the reflexion of the *crypto-porticus*, which at the same time keeps off the north-east wind; wherefore it is hot in the front, and cool in the rear; it also screens from the south-west, and several other winds. These are its delights in winter; but much greater does it afford in summer; for before midday, the *xystus*, and after, the *gestatio* and neighbouring parts of the garden, are made temperate by its shadow, which is longer or shorter as the day proceeds. The building is also the coolest when the sun shines most intensely on the roof; by opening the windows, the western breezes are enjoyed, and it is therefore never clouded by thick or stagnant air.

At the top of the *xystus*, projecting from the *crypto-porticus*, are the *diætæ* of the garden, and these are my delight; for here, in truth, have I placed my affection. Here is an *heliocaminus* (an apartment made warm by the sun), one side of which looks to the *xystus*, the other to the sea, and both to the sun. From the folding doors is seen the *cubiculum*; from the windows, the *crypto-porticus*: on the side next the sea, and opposite the wall, a very elegant *zotheca* (a closet or small room), recedes, to which a *cubiculum* is either added or separated by means of glazed windows and curtains. Here are contained two chairs and a bed, from the foot of which, you have a prospect of the sea; from the back, of the neighbouring villas; and from the head, of the woods: each window giving a particular prospect, which may be seen either together, or separately. Adjoining is a *cubiculum*, for night and sleep; for here neither the noise of servants, the murmurs of the sea, the roaring of tempests, the glare of lightning, nor even the light of day is perceived till the windows are opened; but all is profound silence, which is caused and preserved by an *andron* (an open court, or space) which is between the wall of the *cubiculum*, and that of the garden; so that all noise is drowned by the void space between.

Close to this *cubiculum* is a small *hypocaustum* (stove), the heat from which, by

a small window, may be regulated at pleasure. Thence a *procœton* and *cubiculum* extend into the sun, where it is enjoyed, though obliquely from its rise, till after midday.

When retired to these apartments, I seem as absent from my villa; I receive great delight here, particularly in the time of the Saturnalia, when the other parts of the villa, by the accustomed freedom allowed at those times, resound with festive clamours; for here, I neither obstruct the diversions of my servants, nor they my study.

These conveniences, these pleasures, are deficient in falling water, yet near the surface are wells, or rather springs, &c. Plinii, Epist. lib. 2, Ep. 17.

This copious description conveys a pretty accurate idea of the extent of a Roman villa, their numerous apartments, various and multiplied conveniences. In the description of Tuscum, by the same Pliny, which merits to be called in modern language, a mansion, more than a villa, being surrounded by an extensive domain, and distant from Rome (one hundred and fifty miles); here apartments more numerous, and of greater elegance, are enumerated; and the garden, or pleasure grounds, were more abundantly accommodated with extensive buildings and conveniences; nor were these two villas all which were possessed by the consul, for he writes to a friend, I prefer my villa of *Tuscum*, to those of *Tusculum*, *Tybur*, and *Præneste*. These three, as well as Laurentinum, were in the vicinity of Rome. On the borders of Lake Larium (his native place, now called Lake Como, on the confines of Switzerland), in Epist. 7, lib. 9, he mentions having several seats; two of which afforded him particular delight; and from their solemn and gay situations, he called one tragedy, the other he called comedy; from one out of the bed-chamber, almost from the bed, you might angle in the lake below.

Of neither of these villas are there any remains. What has been traced of the Tyburtine villa of Adrian, according to the plans published by Piranesi, show it to have been of an amazing extent; here were, each upon a grand scale, an *hippodrome*, a *naumachia*, a *theatre*, a *palæstra*, a *nymphæum*, a *castle* for a guard, with a temple to Mars; a *piscina*, a *bibliotheca*, a *stadium*, a *vestibulum*, of various apartments, (being the entrance to the baths, stadium, &c. &c.); *baths*, a *pretorium*, a *pinacotheca*, an *hospitalia*, for visitors; a *canopum*, an *academia*, an *odeum*, and *theatre*; a *lyceum*, a *palace*, for the emperor, with many other buildings; each of which were accommodated with various apartments, fitted up in a style of elegance and grandeur scarcely credible; this truly princely palace occupied a space of ground about twelve hundred yards in length.

The villa of Mecænas, in the neighbourhood of Tivoli, was also very extensive, and not less elegant.

The villas of the modern Romans and Italians generally are extremely beautiful and costly, and may be with equal propriety denominated palaces, as indeed they often are (See PALACE). In the gardens surrounding them, it is customary to plant vigorous and fine hedge-rows of laurels of every description, which besides forming an agreeable variety, preserve, even in the midst of winter, a delightful verdure. In the larger seats of this order, such, for instance, as the *Albani*, the *Borghese* or *Pinciana*, the *Pamphili*, &c. all sorts of expensive fruits and flowers are collected to decorate the walks, whilst beyond spreads the ample park, and on the house itself the granite and porphyry of Egypt, the marbles of Africa and Paros, the sculptures of ancient Greece and Rome, the paintings of the most eminent modern masters, all are lavished with unsparing hand. It is in vain to expect, or seek, in colder climates, to produce the same exuberant and voluptuous variety which glows and revels in the plantations of this delicious country: perhaps the most exquisite enjoyment of them is to be felt at night, when the heat of the day has subsided and the fragrance of the flowers is exhaled with additional power. See COTTAGE.

VIRTUS. [Lat. *virtue*.] *In archaiology*. Virtus is spoken of personally, both in verse and prose. She had several temples at Rome, with representations in them of her. Though these may be all lost, her figure is common on the medals of the emperors.

Mr. Spence thinks her figure more common than is imagined, and that in the Admiranda, what Bartoli takes to be the genius of Rome, is this goddess; as where she is giving the globe to M. Aurelius, and where she is guiding Titus's chariot, and conducting Adrian home. On these she is dressed like an Amazon. She is sometimes in a coat of mail, or a short succinct vest, with her legs bare, like the Roman soldiers. She has a manly face and air, and generally grasps a sword or spear in her hand. Her dress shows her readiness for action, and her look a firmness not to be conquered by difficulties or dangers.

VOLCANO. [Ital. from *Vulcan*, the god of fire.] *In painting.* The eruption of a volcano is perhaps the most magnificent as well as the most terrible spectacle with which Nature presents us. It is generally announced several months previously by a succession of signs. The size of the volcano augments from day to day, becoming of a frightful magnitude; and, in proportion, the cinders, ashes, and burning stones are hurled upwards a prodigious height.

The artist may make great use of the explosion of a volcano; and even, speaking generally, we should advise him, should he ever be placed in the way, to embrace the opportunity of contemplating its awful beauties, since such a sight could hardly fail to strengthen his ideas, and consequently his chance of expression, of the sublime in his art.

The following description of one of the most celebrated volcanoes in the world, extracted from the work of a recent author, will give the reader a good notion of the effect of similar scenes.

"Excursion to Vesuvius.—My surgeon warned me against this ascent, but I was resolved to go. To leave Naples, without seeing Vesuvius, would be worse than to die at Naples, after seeing Vesuvius. The ascent was laborious enough, but no part of the labour fell upon my shoulders. When we arrived at the foot of the perpendicular steep, where it was necessary to leave our mules; while my companions toiled up on foot, I got into an easy armchair, and was carried on the shoulders of eight stout fellows, to my own great astonishment, and to the greater amusement of my friends, who expected every moment to see us all roll over together. I certainly should not have thought the thing practicable, if I had not tried it; for the ascent is as steep, as it is well possible to be; the surface however is rugged; and this enabled the men to keep their footing. It was not the pleasantest ride in the world; for, without pretending to any extraordinary sensibility, there is something disagreeable in overcoming difficulties by the sweat of other men's brows, even if they are well paid for it. The men however seemed to enjoy it vastly.

"When you arrive at the top, it is an awful sight; more like the infernal regions than any thing that human imagination could suggest. As you approach the great crater, the crust upon which you tread becomes so hot, that you cannot stand long on the same place; your progress is literally '*per ignes suppositos cineri doloso;*'—if you push your stick an inch below the surface, it takes fire, and you may light paper by thrusting it into any of the cracks of the crust. The craters of the late eruption were still vomiting forth flames and smoke, and when we threw down large stones into these fiery mouths, one might have thought they were replying to Lear's imprecation—'*Rumble thy belly full!—Spit fire!*'—Altogether, it was a most sublime and impressive scene, and may be classed amongst the very few things in the world that do not disappoint expectation.

"The look down, into the great crater at the summit, is frightfully grand; and when you turn away from the contemplation of this fearful abyss, you are presented with the most forcible contrast, in the rich and luxuriant prospect of Naples, and the surrounding country; where all is soft and smiling as far as the eye can see."

VOLUMEN. [Lat. from *volvo*, to roll, because the ancients used to write on rolls.] *In archaiology.* A word synonymous with *book.* The Greeks as well as Romans used to roll up their manuscripts, and representations of these *volumenes* are to be met with on a great variety of ancient monuments.

VOLUTE. [Lat. *voluta*, from *volvo*, to roll.] *In architecture.* A kind of spiral scroll used in the Ionic and Composite capitals, whereof it forms the principal characteristic and ornament.

VOMITARIA. [Lat.] *In ancient architecture.* Gates or doors of the amphitheatre by which the spectators entered, in order to take their seats. Perhaps the name was derived from the concourse of people which flowed through them on public occasions.

VOTIVE. [Lat. *votivus*, from *votum*, a vow.] *In archaiology.* See EAR, SECULAR GAMES, STORM.

VOUSSOIRS. [Fr.] *In architecture.* Cut stones placed wedge-wise and employed in forming the arch of an arcade, &c.

VULCAN. [Lat. *Vulcanus.*] *In mythological painting and sculpture.* A god of the ancients, who presided over fire, and was the patron of all artists who worked iron and metals. He was the son of Juno alone, she in this wishing to imitate Jupiter, who had produced Minerva from his brains. According to Homer, he was the son of Jupiter and Juno, and the mother was so disgusted with the deformities of her son, that she threw him into the sea as soon as born, where he remained for nine years. According to the more received opinion, Vulcan was educated in heaven with the rest of the gods, but his

father kicked him down from Olympus on his attempting to deliver his mother, who had been fastened by a golden chain for her insolence. His journey through the air, from the time it occupied, might be called a "nine days' wonder;" and on his fall in the island of Lemnos, the inhabitants, seeing him in the air, caught him in their arms. He nevertheless broke his leg by the fall, and ever after remained lame of one foot.

Vulcan took up his residence in Lemnos, where he built himself a palace, and raised forges to work metals. The inhabitants of this island became sensible of his industry, and were taught all the useful arts which could civilize their rude manners, and render them serviceable to the good of society. The first work of this god was, according to some, a throne of gold with secret springs, which he presented to his mother to be revenged on her for her want of affection towards him. Juno was no sooner seated on the throne than she found herself unable to move. The gods attempted to deliver her by breaking the chains which held her, but to no purpose, and Vulcan alone had the power to set her free.

The ancient artists and poets have described and represented Vulcan in various ways. He was exceedingly celebrated for the automata executed by him, and many have spoken of two golden statues which not only seemed animated, but which walked by his side, and even assisted him in the working of metals. The Cyclops of Sicily (see CYCLOPS) were his ministers and attendants, and with him they fabricated not only the thunderbolts of Jupiter, but likewise arms for the gods and the most celebrated heroes. Vulcan's forges were supposed to be under Mount Ætna, and indeed in every part of the globe where there were volcanoes. The best known of the works of Vulcan which were presented to mortals are the arms of of Achilles, those of Æneas, the shield of Hercules described by Hesiod, a collar given to Hermione, the wife of Cadmus, and a sceptre which was in the possession of Agamemnon, king of Argos and Mycenæ. The collar proved fatal to all who wore it; but the sceptre, after the death of Agamemnon, was carefully preserved at Cheronœa, and regarded as divine. Venus is universally admitted to have been the wife of Vulcan; but her infidelity is well known, and particularly her amour with Mars.

The worship of Vulcan was well established, particularly in Egypt, at Athens, and at Rome. It was customary, in the sacrifices offered to him, to burn the entire victim, and not reserve part of it, as in the immolations to the rest of the gods. A calf and a boar-pig were the principal victims offered.

This god was generally represented as covered with sweat, blowing with his nervous arm the fires of his forges. His breast was hairy, and his forehead blackened with smoke. Some artists make him lame and deformed, holding a hammer raised in the air, ready to strike; with the other hand, he turns, by the help of pincers, a thunderbolt on his anvil, for which an eagle waits by his side, to carry it to Jupiter. He appears on some monuments with a long beard, dishevelled hair, half naked, and a small round cap on his head, whilst in his hand he holds a hammer and pincers. The Egyptians symbolised him under the figure of a monkey.

W.

WAINSCOT. [*wagescot*, Dutch.] *In architecture.* The timber work serving to line the walls of a room, being generally made in panels, and painted, to serve instead of hangings.

WALKS. [walen, German, pealcan, Sax.] See LANDSCAPE GARDENING.

WALL. [Sax.] *In architecture.* The most important part of any building, serving both to support the roof, floors, &c. and to enclose the whole.

Walls are of various kinds, according to the materials employed in their construction: as, for example, plastered or mud walls, brick walls, rough or hewn stone walls, flint or boulder walls, boarded walls, &c. See ARCHITECTURE.

WARRIORS. [from *war.*] *In painting, sculpture, and engraving.* The warlike qualities have ever been esteemed worthy of particular admiration, and as giving the clearest title to glory and immortality; and if such an opinion obtains in later periods, in the earlier ages of the world it was far more extensively diffused; and hence it is by no means matter of surprise that the greatest number of ancient monuments of art have been devoted to the glorification

of the warlike virtues. In the heroic ages, indeed, there were no other lauded or cared about; and provided a man was a courageous warrior, it mattered not how great his folly or knavery in other respects.

The Greek and Roman artists were constantly employed in works of this nature, either to depict the deified heroes of mythological worship, or the famous chiefs of their own times. With regard to the former, they established a *beau ideal*, to which they elevated the common nature and attributes of man; and to this elevation they occasionally lifted the greatest and most celebrated of their princes and generals, such, for instance, as Alexander, Lysimachus, Cæsar, Augustus, Adrian, &c. The painter or sculptor invariably took, as the base or foundation of this ideal, a body formed and developed by fatigue and exercise. The appearance of robust youth was also considered indispensable to approach towards the heroical attributes; and, from this approximation, it is sometimes difficult, when there is no assistance from accompanying inscriptions, to decide whether the picture or statue is meant for a human or divine personage. The ancient writers themselves cite a considerable number of figures, naked (save casque and cincture) but without any other attribute, respecting which they are perfectly incapable of rendering any determinate explanation. Hence it obviously results, that in restoring a mutilated statue, the greatest care should be taken to preserve, as far as possible, the sentiment and meaning of the original.

Among the ancient bronzes spoken of by Pliny, we find in the number, one male figure naked and colossal; another naked, one, executed by Polycletes, and placed upon a cube; seven similar figures by Pythagoras of Samos, &c. and a great variety besides, which bear no specific names, and are altogether of doubtful quality.

Another class of statues is that of warriors armed and clothed. These afford ample opportunities for the display of the sculptor's ability in exhibiting the armour, the shield, the casque, &c. which were often decorated with rilievi and other ornaments. Many of these are no further recognisable than by the head or by some inscription. Whenever, in modern times, the trunks or torsos of statues have been discovered, the artist naturally wants these indications, which might guide him in making the restorations consistent with the primeval object of the performance. Several statues of this kind, perfectly armed, and clothed with the *paludamentum*, bear the names of different illustrious Romans; but the authenticity of these appellations is commonly of very dubitable origin. Amongst these are the Julius Cæsar of the Capitol, the arms and hands of which have been restored; another at the villa Borghese; the Augustus of the Capitol; the Domitian of the Giustiniani Palace, the head of which is strongly suspected by the acute and learned Winckelmann; Antoninus Pius, in the gardens of the villa Mattei; Marius Aurelius in the Giustiniani Gallery; the Pescennius Niger, in the palace Altieri; the Carecalla of the Farnese, &c. &c.

Upon engraved gems we also find a great number of ancient warriors depicted. They are to be met with both naked and clothed, and in every variety of attitude. Many are represented in the 10th vol. of the *Museum of Florence*.

At Florence are two figures known under the name of warriors, likewise engraved in the *Museum Florentinum*, 3d vol. 77th and 78th pp.; and with the first of these two may be compared a cornelian engraved at No. 4 of the 67th plate, 2d vol. Gori, who was not very scrupulous in awarding names to these relics, gave, to these, Roman appellations, although the air as well as vestments of one, are those of a barbarian rather than of a Roman. Heyne thinks that the head of this statue (the expression of which is very common) together with the buckler, are by a modern hand. The other warrior appears about to strike a blow with his lance.

Washing. [from the verb.] *In painting*. Is when a design, drawn with a pen or crayon, has some one colour laid over it with a pencil, as Indian ink, bistre, or the like, to make it appear the more natural, by adding the shadow of prominences, apertures, &c. and by imitating the particular matters whereof the thing is supposed to consist. Thus they wash with a pale red, to imitate brick and tile; with a pale Indian blue, to imitate water and slate; with green, for trees and meadows; with saffron or French berries, for gold and brass; and with several colours for marbles.

Washing of Ores: the purifying an ore of any metal, by means of water, from earths and stones, which would otherwise render it difficult of fusion.

Water-Colour Painting. See Painting.

Waves. [pæge, Sax.] See Tempest.

Ways. [pæg, Sax.] *In archaiology*. It is by no means certain which nation of

antiquity first established either military or public ways. The Persians seem to have constructed them at a very remote period; and according to Diodorus Siculus, the famous or rather infamous Semiramis established them throughout the whole of her extensive dominions; for which purpose she caused the "valleys to be exalted and the high places to be brought low." Justinus assures us that Xerxes employed likewise large sums for the construction of public ways. According to Isidorus, at the end of his 15th book, the Carthaginians were the first who paved their public ways.

Ancient authors do not furnish us with many data by which to judge of the degree of care bestowed by the Grecian states in this matter. Herodotus simply says that, amongst the Lacedæmonians, the management of these roads was wholly vested in the kings; and in this case, it is not very uncharitable to imagine that they were badly attended to, since it is the nature of royal power to be regardless of the accommodation of "the general." Strabo, indeed, says plainly, that the Greeks neglected three objects to which the Romans, on the other hand, paid especial attention: viz. cloaca, or common sewers, aqueducts, and public ways.

To ancient Rome therefore, we must look for the perfection of these works, military and public, whether as regards magnitude or splendour. The remains of the most celebrated of them, to this day, attract the attention and excite the admiration of all travellers over the classical ground of Italy, to which country they are not however confined. These ruins have offered to all subsequent ages a model of style which, applied to a national and important object, united solidity, utility, and beauty.

Nicholas Bergier, historiographer of France, has composed, on the Roman ways, an excellent work entitled:—*Histoire des grands Chemins de l'Empire Romain pavés depuis la Ville de Rome jusq'aux Extrémités de son Empire*, Paris, 1622, 4to. Brussels, 1729, 2 vols. 4to. This has been translated into Latin by H. C. Hennin, and inserted in the 10th vol. of the *Thesaurus* of Grœvius, with observations by the translator and by J. D. Du Bos. It has likewise been translated into Italian and English. Count Marsigli's *Danubius illustratus* may also be consulted, vol. 2. p. 81. *Dissertation* d'Aug. Calmel, *sur les grands Chemins de la Lorraine*, Nanci, 1727. *Vetera Romanorum Itineraria, cum integris Jos. Simleri, Hieron. Suritæ, et And. Schotti notis: Itinerarium hierosolymitanum et Hieroclis grammatici Synecdemus, curante* Petro Wesselingio, Amst. 1735, 4to.—Adrian. Steger, de *Viis militaribus veterum Romanorum in Germania*, Lips. 1738, 4to. Fabretti, *De Aquis et Aquæductibus Romæ*, Dissert. 3, in the 4th vol. of the *Thesaurus* of Grœvius. Vinc. Bartolucci, *Dissertatio de Viis publicis*, and the 13th chap. of the *Archaiology of Architecture*, by M. Stieglitz.

Weights. [*gewicht*, German.] *In archaiology*. In several different cabinets, as well as in the works of sundry antiquarians, we find specimens of ancient weights. Among the small number of these which Caylus has collected, one (pl. 39, vol. 5.) merits a degree of attention. It is of the ancient town of Cyzicus, the name of which is on one of its sides (as common on medals), on the other side ὀις, signifying that this little bronze weight was double. These words are worked in rilievo, and placed on either side of a fish, which occupies the middle of the square. This symbol proves that fishing was an important trading object among the inhabitants of Cyzicus.

In Montfaucon, several of these weights are found, bearing the heads of emperors; but perhaps the most curious is that published by Caylus at the 49th plate of his 2d vol. (No. 1.) This is of lead, and was found in the isle of Chios. It presents a sphinx, resting upon the vase called *amphora*, and behind which is the emblem of two mines, in rilievo. The sphinx, such as it appears upon this monument, is rarely met with upon the medals of Chios. Whenever this fantastic animal is encountered thereon, it is always, for what reason is uncertain, grouped with a vase of a particular form.

Well. [pæl, Sax.] *In architecture*. A deep hole sunk underground, generally of a cylindrical figure, and walled with stone and mortar, for the purpose of collecting the water exuding from the surrounding strata.

Joseph's Well is situate in the edifice of Cairo, commonly called Joseph's Palace. It is a vulgar error to attribute either house or well to the illustrious patriarch so named: for in fact the appellation is taken from a prince, father to the one under whose reign the edifice was constructed.

This celebrated well, carved in the rock, is two hundred and eighty feet deep, and forty-two in circumference. It is descend-

ed by means of a circular staircase of three hundred steps, and the declivity is extremely gentle. The partition which separates the staircase from the well is formed also of a portion of rock. Small windows, at given distances, illuminate it. The well consists of two separate basins, not however perpendicular to each other.

WHITE. [hpit, Sax. *wit*, Dutch.] *In painting.* A negative colour. The effect of the admission of light upon any object which reflects it *directly*. Painters reduce all their colours under the two classes of dark and light; the former comprehending BLACK (which refer to), and such as are obscure and earthy; the latter white and such as approach nearest to it.

Although white may be considered the colour most significatory of light, as black is of the privation of it, the painter should take care never to introduce upon his canvass either of these negative colours pure and unmixed; since, to give due effect to the CHIARO' SCURO (which see), gradation is indispensably necessary. Sometimes, the manner in which the artist has admitted the light into his painting-room, and directed it upon his work, deceives him with regard to the effect of his whites, which appear to him while laying them in brilliant and natural, and softening the acrimony of his shades; whereas, when exposed to a light expanded generally, or placed in positions less favourable, the lustre disappears, the colours look crude and offensive to the eye, and the exertions of the painter are lost.

WINDOW. [*vindue*, Danish. Some imagine it to have been originally *wind-door*.] *In architecture.* This word has various derivations. Perhaps the most direct is the Danish one first cited; but there can be little doubt that the original meaning of the word was, like the Welsh term *wynt dor*, a passage for the wind. In fact, it is still provincially denominated *windor* in Lancashire, as it is (though with no such retrospective intention) among the citizens of Cockaigne.

Windows are an essential part of every building, since light is one of the principal necessaries of existence. At the same time, they may be so introduced as to contribute to ornamental as well as useful purposes; and the architect who thoroughly understands his profession will take especial care that they do so contribute. Nothing can be more tasteless and ugly than the "hole in the wall" which is commonly denominated a window. Grace may be displayed not only in their number, size, and disposition, but in their shape and ornaments.

The proportions of windows should of course vary according to the usages of different countries, and these usages are influenced by divers causes, such as climate, degrees of temperature, length of days, clearness of sky, &c. &c. In countries where, as in our own, the sun has seldom any very fierce sway, even in summer, and where the winter is long and dreary, the windows should be large and numerous, in order to convey to the interior of the house as much as possible of the light and heat that Nature accords. On the other hand, in hot climates, they may be fewer and of less extent. Thus, then, it is impossible to lay down precise rules for the construction of these portions of architecture; but nevertheless there *are* rules springing out of the principles of solidity, convenience, agreement of parts, and the pleasure which arises from an harmonious combination. See PROPORTION.

In the most ancient eras, the windows of habitations were very small and narrow; and the same remark obtains with regard to the castles and other edifices constructed during the middle ages. In the painting on the Greek vase which represents Jupiter about to scale the window of Alcmena, the opening is exceedingly small. According to Seneca those of the baths of Scipio were so little that they merited not the name, and might rather be denominated *crevices*. As the Romans improved, however, in the elegant arts, this particular was not overlooked, and both their town and country houses were decorated with numerous and ample windows. It was not customary, though, to have them overlooking the street; and they were in the majority of instances confined to the interior court of the house.

The windows of the temple of Jerusalem were larger withinside than without; and appear to have served the double purpose of admitting light and giving vent to the fumes of the incense which was so plentifully burned. The ancient temples had not generally windows; some exceptions, however, exist to this observation.

Before the use of glass became common, which was not till towards the end of the twelfth century, the windows in this country seem generally to have been composed of paper; which properly prepared with oil, forms no contemptible defence against the intrusions of the weather, and is a

tolerable vehicle for the admission of light. See GLASS.

WOMAN. [pɪfman, pɪmman, Sax.] *In painting, sculpture, &c.* See MAN.

WONDERS. [German, *wunder.*] *In archaiology.* All antiquarians are, we believe, agreed as to the *number* of the Seven Wonders of the World, but differ somewhat as to their identity. The following is the enumeration most adhered to. The gardens of Babylon supported on pillars; the pyramids of Egypt; the statue of Jupiter Olympius; the Colossus of Rhodes; the walls of Babylon; the temple of Diana of Ephesus; and the tomb of Mausŏlus. See BABYLON, COLOSSUS, DIANIUM, MYTHOLOGY, MAUSOLEUM, PYRAMID.

X.

XENIA. [Gr. ξένιον, from ξένος, a guest.] *In archaiology.* Vitruvius thus denominates those paintings which represent landscapes, vases with fruits, fishes, &c.

XENODOCHIUM. [Gr. ξενος, a guest, and δεχομαι, to receive.] *In archaiology.* See HOSPITAL, TESSERA.

XIPHIAS. [ξιφίας, from ξιφος, a sword.] *In archaiology.* This word is one of those found on the stone called the sapphire of Constantine. This gem represents a hunter attacking a wild boar. Above the horseman are engraved the words *Constantius Aug.* and over the boar the word *Xiphias.* Underneath is a female couching figure, above which are the words *Cæsarea Cappadocie.*

The most rational explanation of this ancient relic is, that it depicts the Emperor Constantius hunting a sort of marine monster called by Strabo, Polybius, and others, *xiphias;* and that the crouching figure, who holds a *cornucopia* (see HORN OF PLENTY), is emblematical of the town *Cæsarea,* near which the chase was carried on.

XYSTARCH. [Gr. ξυστὸς, a wrestling school, and ἀρχὸς, a chief.] *In archaiology.* An officer charged with the surveillance and direction of the *stadia,* &c. Ammianus Marcellinus attires him partly in purple, and with a sort of crown. He was no doubt a species of ancient *master of the ceremonies.* See STADIUM, PALESTRÆ.

XYSTUS. [Gr. ξυστὸς, from ξύω, to smooth or polish, it being customary for the combatants to anoint their bodies with oil.] *In archaiology.* A large court with a portico on three sides, planted with rows of trees, where the ancients performed athletic exercises—running, wrestling, &c. See PALÆSTRÆ.

Y.

YELLOW. [ȝealeɼe, Sax. *gheleuwe,* Dutch.] *In painting.* One of the three original colours of light, from which others are compounded. Naples yellow is a beautiful variety, greatly employed by painters, and formerly thought to be prepared from arsenic, but now discovered to have lead for its basis.

YOUTH. [yeoȝuth, Sax.] *In painting, sculpture, &c.* The most beautiful period of life, and consequently that which the artist will select to display and embody his abstract ideal of corporeal human perfection. The smooth and glowing substance of the skin, the beautifully defined contours of the figure, the firm and well knit muscles of man, and the delicious shapeliness of woman; these qualities, as they are in themselves uniformly amiable in real life, so they cannot fail to draw forth the ability of the artist, and excite the admiration of the beholder, when transmitted to canvas or marble.

Z.

ZOCLE. [German.] *In architecture.* A low square member, which serves to elevate a statue, vase, &c.: also when a range of columns is erected on one continued high *plinth,* it is called a *Zocle;* it differs from a pedestal, being without base or cornice.

ZODIA. [Gr. ζωδιον, a living creature.] *In painting and sculpture.* See ARABESQUES.

ZODIAC. [Gr. ζωδιάκὸς, containing living

creatures, from ζάω, to live.] *In emblematical painting and sculpture.* Every body knows that the zodiac is divided into twelve parts, according to the circle described by the sun every year. The ancients represented the constellations by so many animals, whose names they bear; but in order to bring them into little space, conventional terms and figures were often employed. There exist a considerable number of monuments upon which the zodiac is figured. One of the most curious is the rustic calendar, called the *Farnese calendar* because it belongs to the villa of that name. It is a square marble, each face of which presents three signs of the Zodiac, and three columns inscribed with the names of the months, together with those of the tutelary deities, and also the length of the equinoxial and natural hours of the day and night. This marble served as base to a sundial.

Upon the summit of the nave of the grand temple of Tentyra or Denderah is a small apartment, part of the cieling of which is occupied by a celestial planisphere. M. Denon, in his *Voyage en Egypte,* pl. 130, has given a drawing of it. There we perceive the twelve signs of the Zodiac represented, intermixed with hieroglyphic figures. This would be the most ancient monument of the kind, could we safely refer its date to the period of Egyptian freedom; but there is reason to think that it was constructed during the reign of Tiberius.

The custom of placing the signs of the Zodiac upon sacred monuments has been continued since the adoption of Christianity. There is a very old example over one of the lateral or side gates of the cathedral of Autun; and others at the portals of the cathedrals of Vezelay and of Arras. M. Dupuis has described that at the Parisian church; and M. Lalande has given drawings and descriptions of that at the church of Strasburgh, in the *Mémoires de l'Institut National.* See Planets.

Zone. [Gr. ζώνη, from ζωννυω, to encompass.] *In architecture,* See Cincture.

Zophorus. [Gr. from ζοον, an animal, and φέρω, to bear or support.] *In architecture.* See Frieze.

Zotheca. [Lat.] *In architecture.* A small room, or alcove, which might be added to or separated from another, by means of curtains and windows. See *Pliny's description of Laurentinum,* in the article Villa.

FINIS.

[illegible] and C. Whittingham, Chiswick.